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agagagtcgc tggccgtggt cgccgctagg taggatatat ctgcatcttg aaaggaagat 300

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Val Asp Glu Pro Thr Leu Ser Trp Ser Arg Pro Ser Thr Arg Ala Ser
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Glu Val Leu Cys Ser Thr Asn Val Ser His Tyr Glu Leu Gln Val Glu
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ata gga aga gga ttt gac aac ttg act tct gtc cat ctt gca cgg cat 602
Ile Gly Arg Gly Phe Asp Asn Leu Thr Ser Val His Leu Ala Arg His
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Thr Pro Thr Gly Thr Leu Val Thr Ile Lys Ile Thr Asn Leu Glu Asn

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Cys Asn Glu Glu Arg Leu Lys Ala Leu Gln Lys Ala Val Ile Leu Ser
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His Phe Phe Arg His Pro Asn Ile Thr Thr Tyr Trp Thr Val Phe Thr
115 120 125

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Val Gly Ser Trp Leu Trp Val Ile Ser Pro Phe Met Ala Tyr Gly Ser
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gca agt caa ctc ttg agg acc tat ttt cct gaa gga atg agt gaa act 842
Ala Ser Gln Leu Leu Arg Thr Tyr Phe Pro Glu Gly Met Ser Glu Thr
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Leu Ile Arg Asn Ile Leu Phe Gly Ala Val Arg Gly Leu Asn Tyr Leu
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His Gln Asn Gly Cys Ile His Arg Ser Ile Lys Ala Ser His Ile Leu
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Ser Leu Val Lys His Gly Gln Arg His Arg Ala Val Tyr Asp Phe Pro
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cag ttc agc aca tca gtg cag ccg tgg ctg agt cca gaa cta ctg aga 1082
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Gln Asp Leu His Gly Tyr Asn Val Lys Ser Asp Ile Tyr Ser Val Gly
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att aca gca tgt gaa tta gcc agt ggg cag gtg cct ttc cag gac atg 1178
Ile Thr Ala Cys Glu Leu Ala Ser Gly Gln Val Pro Phe Gln Asp Met
260 265 270

cat aga act cag atg ctg tta cag aaa ctg aaa ggt cct cct tat agc 1226
His Arg Thr Gln Met Leu Leu Gln Lys Leu Lys Gly Pro Pro Tyr Ser
275 280 285

cca ttg gat atc agt att ttc cct caa tca gaa tcc aga atg aaa aat 1274
Pro Leu Asp Ile Ser Ile Phe Pro Gln Ser Glu Ser Arg Met Lys Asn

JP06506502A

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305 310 315

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Ser Gly Thr His Thr Val Asn Ser Asp Arg Leu His Thr Pro Ser Ser
320 325 330 335

aaa act ttc tct cct gcc ttc ttt agc ttg gta cag ctc tgt ttg caa 1418
Lys Thr Phe Ser Pro Ala Phe Phe Ser Leu Val Gln Leu Cys Leu Gln
340 345 350

caa gat cct gag aaa agg cca tca gca agc agt tta ttg tcc cat gtt 1466
Gln Asp Pro Glu Lys Arg Pro Ser Ala Ser Ser Leu Leu Ser His Val
355 360 365

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Phe Phe Lys Gln Met Lys Glu Glu Ser Gln Asp Ser Ile Leu Ser Leu
370 375 380

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Leu Pro Pro Ala Tyr Asn Lys Pro Ser Ile Ser Leu Pro Pro Val Leu
385 390 395

EP 0 950 705 A1

cct tgg act gag cca gaa tgt gat ttt cct gat gaa aaa gac tca tac 1610
Pro Trp Thr Glu Pro Glu Cys Asp Phe Pro Asp Glu Lys Asp Ser Tyr
400 405 410 415

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Trp Glu Phe

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tcaatataat ttttgagcca gttaattttt ttcagtattt tgctgtccct tgggaatggg 1959

ccctcagagg acagtgcttc caagtacatc ttctcccaga ttctctggcc tttttaatga 2019

gctattgtta aaccaacagg ctagtttatc ttacatcaga cccttttctg gtagagggaa 2079

aatgtttgtg ctttcccttt ttcttctgtt aatacttatg gtaacaccta actgagcctc 2139

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35 40 45

Val Leu Cys Ser Thr Asn Val Ser His Tyr Glu Leu Gln Val Glu Ile
50 55 60

Gly Arg Gly Phe Asp Asn Leu Thr Ser Val His Leu Ala Arg His Thr
65 70 75 80

Pro Thr Gly Thr Leu Val Thr Ile Lys Ile Thr Asn Leu Glu Asn Cys
85 90 95

Asn Glu Glu Arg Leu Lys Ala Leu Gln Lys Ala Val Ile Leu Ser His
100 105 110

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Phe Phe Arg His Pro Asn Ile Thr Thr Tyr Trp Thr Val Phe Thr Val
115 120 125

Gly Ser Trp Leu Trp Val Ile Ser Pro Phe Met Ala Tyr Gly Ser Ala
130 135 140

Ser Gln Leu Leu Arg Thr Tyr Phe Pro Glu Gly Met Ser Glu Thr Leu
145 150 155 160

Ile Arg Asn Ile Leu Phe Gly Ala Val Arg Gly Leu Asn Tyr Leu His
165 170 175

Gln Asn Gly Cys Ile His Arg Ser Ile Lys Ala Ser His Ile Leu Ile
180 185 190

Ser Gly Asp Gly Leu Val Thr Leu Ser Gly Leu Ser His Leu His Ser
195 200 205

Leu Val Lys His Gly Gln Arg His Arg Ala Val Tyr Asp Phe Pro Gln
210 215 220

Phe Ser Thr Ser Val Gln Pro Trp Leu Ser Pro Glu Leu Leu Arg Gln
225 230 235 240

Asp Leu His Gly Tyr Asn Val Lys Ser Asp Ile Tyr Ser Val Gly Ile

WO 96/05309 PCT/US95/09914

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Thr Ala Cys Glu Leu Ala Ser Gly Gln Val Pro Phe Gln Asp Met His
260 265 270

Arg Thr Gln Met Leu Leu Gln Lys Leu Lys Gly Pro Pro Tyr Ser Pro
275 280 285

Leu Asp Ile Ser Ile Phe Pro Gln Ser Glu Ser Arg Met Lys Asn Ser
290 295 300

Gln Ser Gly Val Asp Ser Gly Ile Gly Glu Ser Val Leu Val Ser Ser
305 310 315 320

Gly Thr His Thr Val Asn Ser Asp Arg Leu His Thr Pro Ser Ser Lys
325 330 335

Thr Phe Ser Pro Ala Phe Phe Ser Leu Val Gln Leu Cys Leu Gln Gln
340 345 350

Asp Pro Glu Lys Arg Pro Ser Ala Ser Ser Leu Leu Ser His Val Phe
355 360 365

Phe Lys Gln Met Lys Glu Glu Ser Gln Asp Ser Ile Leu Ser Leu Leu
370 375 380

FEUILLE DE REMPLACEMENT (REGLE 26)

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Ser Ser Asp Pro Ala Leu Ile Gly Leu Ser Thr Ser Val Ser Asp Ser

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Asn Phe Ser Ser Glu Glu Pro Ser Arg Lys Asn Pro Thr Arg Trp Ser
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aca aca gct ggc ttc ctc aag cag aac act gct ggg agt cct aaa gcc 197
Thr Thr Ala Gly Phe Leu Lys Gln Asn Thr Ala Gly Ser Pro Lys Ala
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Cys Asp Arg Lys Lys Asp Glu Asn Tyr Arg Ser Leu Pro Arg Asp Thr
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Ser Asn Trp Ser Asn Gln Phe Gln Arg Asp Asn Ala Arg Ser Ser Leu
75 80 85

agt gcc agt cac cca atg gtg ggc aag tgg cag gag aaa caa gaa cag 341
Ser Ala Ser His Pro Met Val Gly Lys Trp Gln Glu Lys Gln Glu Gln
90 95 100

gat gag gat ggg aca gaa gag gat aac agt cgt gtt gaa cct gtt gga 389
Asp Glu Asp Gly Thr Glu Glu Asp Asn Ser Arg Val Glu Pro Val Gly
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His Ala Asp Thr Gly Leu Glu His Ile Pro Asn Phe Ser Leu Asp Asp
120 125 130 135

atg gta aag ctc gta gaa gtc ccc aac gat gga ggg cct ctg gga atc 485
Met Val Lys Leu Val Glu Val Pro Asn Asp Gly Gly Pro Leu Gly Ile
140 145 150

cat gta gtg cct ttc agt gct cga ggc ggc aga acc ctg ggg tta tta 533
His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu Gly Leu Leu
155 160 165

gta aaa cga ttg gag aaa ggt ggt aaa gct gaa cat gaa aat ctt ttt 581
Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu His Glu Asn Leu Phe
170 175 180

cgt gag aat gat tgc att gtc agg att aat gat ggc gac ctt cga aat 629
Arg Glu Asn Asp Cys Ile Val Arg Ile Asn Asp Gly Asp Leu Arg Asn
185 190 195

aga aga ttt gaa caa gca caa cat atg ttt cgc caa gcc atg cgt aca 677
Arg Arg Phe Glu Gln Ala Gln His Met Phe Arg Gln Ala Met Arg Thr
200 205 210 215

ccc atc att tgg ttc cat gtg gtt cct gca gca aat aaa gag cag tat 725
Pro Ile Ile Trp Phe His Val Val Pro Ala Ala Asn Lys Glu Gln Tyr

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220 225 230

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235 240 245

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Ser Pro Asp Ser Gln Tyr Ile Asp Asn Arg Ser Val Asn Ser Ala Gly
250 255 260

ctt cac acg gtg cag aga gca ccc cga ctg aac cac ccg cct gag cag 869
Leu His Thr Val Gln Arg Ala Pro Arg Leu Asn His Pro Pro Glu Gln
265 270 275

ata gac tct cac tca aga cta cct cat agc gca cac ccc tcg gga aaa 917
Ile Asp Ser His Ser Arg Leu Pro His Ser Ala His Pro Ser Gly Lys
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cca cca tcc gct cca gcc tcg gca cct cag aat gta ttt agt acg act 965
Pro Pro Ser Ala Pro Ala Ser Ala Pro Gln Asn Val Phe Ser Thr Thr
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Asp Val Thr Ile Gly Gly Ser Ala Pro Ile Tyr Val Lys Asn Ile Leu

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ccc cgg ggg gcg gcc att cag gat ggc cga ctt aag gca gga gac aga 1157

Pro Arg Gly Ala Ala Ile Gln Asp Gly Arg Leu Lys Ala Gly Asp Arg

360 365 370 375

ctt ata gag gta aat gga gta gat tta gtg ggc aaa tcc caa gag gaa 1205

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395 400 405

ctg gtc ttt cgc cag gaa gac gcc ttc cac cca agg gaa ctg aat gca 1301

Leu Val Phe Arg Gln Glu Asp Ala Phe His Pro Arg Glu Leu Asn Ala

410 415 420

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Glu Pro Ser Gln Met Gln Ile Pro Lys Glu Thr Lys Ala Glu Asp Glu

425 430 435

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Asp Ile Val Leu Thr Pro Asp Gly Thr Arg Glu Phe Leu Thr Phe Glu
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Val Pro Leu Ser Asp Ser Gly Ser Ala Gly Leu Gly Val Ser Val Lys
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Ser Ile Ile Asn Gly Gly Ala Ala Ser Lys Asp Gly Arg Leu Arg Val
490 495 500

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Asn Asp Gln Leu Ile Ala Val Asn Gly Glu Ser Leu Leu Gly Lys Thr
505 510 515

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Asn Lys Arg Gly Met Ile Gln Leu Ile Val Ala Arg Arg Ile Ser Lys
540 545 550

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Cys Asn Glu Leu Lys Ser Pro Gly Ser Pro Pro Gly Pro Glu Leu Pro
555 560 565

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570 575 580

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Tyr Ser Gly Ile Glu Gly Leu Asp Glu Ser Pro Ser Arg Asn Ala Ala
585 590 595

ctc agt agg ata atg ggt aaa tac cag ctg tcc cct aca gtg aat atg 1877
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SUBSTITUTE SHEET (RULE 26)

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665 670 675

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680 685 690 695

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700 705 710

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Ser Leu Gly Leu Lys Lys Ser Ser Ser Leu Glu Ser Leu Gln Thr Ala
715 720 725

gtt gcc gag gtg act ttg aat ggg gat att cct ttc cat cgt cca cgg 2261
Val Ala Glu Val Thr Leu Asn Gly Asp Ile Pro Phe His Arg Pro Arg
730 735 740

ccg cgg ata atc aga ggc agg gga tgc aat gag agc ttc aga gct gcc 2309
Pro Arg Ile Ile Arg Gly Arg Gly Cys Asn Glu Ser Phe Arg Ala Ala
745 750 755

atc gac aaa tct tat gat aaa ccc gcg gta gat gat gat gat gaa ggc 2357
Ile Asp Lys Ser Tyr Asp Lys Pro Ala Val Asp Asp Asp Asp Glu Gly
760 765 770 775

atg gag acc ttg gaa gaa gac aca gaa gaa agt tca aga tca ggg aga 2405
Met Glu Thr Leu Glu Glu Asp Thr Glu Glu Ser Ser Arg Ser Gly Arg
780 785 790

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Glu Ser Val Ser Thr Ala Ser Asp Gln Pro Ser His Ser Leu Glu Arg
795 800 805

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Gln Met Asn Gly Asn Gln Glu Lys Gly Asp Lys Thr Asp Arg Lys Lys
810 815 820

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Asp Lys Thr Gly Lys Glu Lys Lys Lys Asp Arg Asp Lys Glu Lys Asp
825 830 835

aaa atg aaa gcc aag aag gga atg ctg aag ggc ttg gga gac atg ttc 2597
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840 845 850 855

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Ser Leu Ala Lys Leu Lys Pro Glu Lys Arg
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35 40 45

Thr Ala Gly Ser Pro Lys Ala Cys Asp Arg Lys Lys Asp Glu Asn Tyr
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Arg Ser Leu Pro Arg Asp Thr Ser Asn Trp Ser Asn Gln Phe Gln Arg
65 70 75 80

Asp Asn Ala Arg Ser Ser Leu Ser Ala Ser His Pro Met Val Gly Lys
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Trp Gln Glu Lys Gln Glu Gln Asp Glu Asp Gly Thr Glu Glu Asp Asn
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Ser Arg Val Glu Pro Val Gly His Ala Asp Thr Gly Leu Glu His Ile
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Pro Asn Phe Ser Leu Asp Asp Met Val Lys Leu Val Glu Val Pro Asn
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Asp Gly Gly Pro Leu Gly Ile His Val Val Pro Phe Ser Ala Arg Gly
145 150 155 160

Gly Arg Thr Leu Gly Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys
165 170 175

Ala Glu His Glu Asn Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile
180 185 190

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Asn Asp Gly Asp Leu Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met

195 200 205

Phe Arg Gln Ala Met Arg Thr Pro Ile Ile Trp Phe His Val Val Pro

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225 230 235 240

Asn Tyr Tyr Ser Ser Arg Phe Ser Pro Asp Ser Gln Tyr Ile Asp Asn

245 250 255

Arg Ser Val Asn Ser Ala Gly Leu His Thr Val Gln Arg Ala Pro Arg

260 265 270

Leu Asn His Pro Pro Glu Gln Ile Asp Ser His Ser Arg Leu Pro His

275 280 285

Ser Ala His Pro Ser Gly Lys Pro Pro Ser Ala Pro Ala Ser Ala Pro

290 295 300

Gln Asn Val Phe Ser Thr Thr Val Ser Ser Gly Tyr Asn Thr Lys Lys

305 310 315 320

Ile Gly Lys Arg Leu Asn Ile Gln Leu Lys Lys Gly Thr Glu Gly Leu

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325 330 335

Gly Phe Ser Ile Thr Ser Arg Asp Val Thr Ile Gly Gly Ser Ala Pro

340 345 350

Ile Tyr Val Lys Asn Ile Leu Pro Arg Gly Ala Ala Ile Gln Asp Gly

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Arg Leu Lys Ala Gly Asp Arg Leu Ile Glu Val Asn Gly Val Asp Leu

370 375 380

Val Gly Lys Ser Gln Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys

385 390 395 400

Met Glu Gly Thr Val Ser Leu Leu Val Phe Arg Gln Glu Asp Ala Phe

405 410 415

His Pro Arg Glu Leu Asn Ala Glu Pro Ser Gln Met Gln Ile Pro Lys

420 425 430

Glu Thr Lys Ala Glu Asp Glu Asp Ile Val Leu Thr Pro Asp Gly Thr

435 440 445

Arg Glu Phe Leu Thr Phe Glu Val Pro Leu Ser Asp Ser Gly Ser Ala

450 455 460

Gly Leu Gly Val Ser Val Lys Gly Asn Arg Ser Lys Glu Asn His Ala
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Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn Gly Gly Ala Ala Ser
485 490 495

Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu Ile Ala Val Asn Gly
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Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp Ala Met Glu Thr Leu Arg
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Val Ala Arg Arg Ile Ser Lys Cys Asn Glu Leu Lys Ser Pro Gly Ser
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Pro Pro Gly Pro Glu Leu Pro Ile Glu Thr Ala Leu Asp Asp Arg Glu
565 570 575

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580 585 590

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595 600 605

EP0656905-B1

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610 615 620

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645 650 655

Trp Ala Lys Ala Ala Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro

660 665 670

Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg Gln

675 680 685

Thr Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Lys Ala Gly Ser

690 695 700

Pro Ser Arg Asp Val Gly Pro Ser Leu Gly Leu Lys Lys Ser Ser Ser

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725 730 735

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10050065.012502

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770 775 780

Glu Ser Ser Arg Ser Gly Arg Glu Ser Val Ser Thr Ala Ser Asp Gln
785 790 795 800

Pro Ser His Ser Leu Glu Arg Gln Met Asn Gly Asn Gln Glu Lys Gly
805 810 815

Asp Lys Thr Asp Arg Lys Lys Asp Lys Thr Gly Lys Glu Lys Lys Lys
820 825 830

Asp Arg Asp Lys Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu
835 840 845

Lys Gly Leu Gly Asp Met Phe Ser Leu Ala Lys Leu Lys Pro Glu Lys
850 855 860

Arg
865

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<210> 5

<211> 30

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Sequence

<400> 5

agcaucgagu cggccuuguu ggccuacugg 30

<210> 6

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
Synthesized Primer Sequence

<400> 6

gcggctgaag acggcctatg tggccttttt tttttttttt tt 42

<210> 7

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially Synthesized Primer Sequence

<400> 7

agcatcgagt cggccttgtt g 21

<210> 8

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially Synthesized Primer Sequence

<400> 8

gcggctgaag acggcctatg t 21

SUBSTITUTE SHEET (RULE 26)

<210> 9

<211> 433

<212> PRT

<213> Homo sapiens

<400> 9

Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu
1 5 10 15

Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr
20 25 30

Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys
35 40 45

Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys
50 55 60

Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu
65 70 75 80

Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys
85 90 95

Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln

10050065.041502

100 105 110

Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val
115 120 125

Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro
130 135 140

Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Tyr Phe Cys Gln Leu
145 150 155 160

Ile Asp Gly Leu Glu Tyr Leu His Ser Gln Gly Ile Val His Lys Asp
165 170 175

Ile Lys Pro Gly Asn Leu Leu Leu Thr Thr Gly Gly Thr Leu Lys Ile
180 185 190

Ser Asp Leu Gly Val Ala Glu Ala Leu His Pro Phe Ala Ala Asp Asp
195 200 205

Thr Cys Arg Thr Ser Gln Gly Ser Pro Ala Phe Gln Pro Pro Glu Ile
210 215 220

Ala Asn Gly Leu Asp Thr Phe Ser Gly Phe Lys Val Asp Ile Trp Ser
225 230 235 240

10095065.041202

Ala Gly Val Thr Leu Tyr Asn Ile Thr Thr Gly Leu Tyr Pro Phe Glu
245 250 255

Gly Asp Asn Ile Tyr Lys Leu Phe Glu Asn Ile Gly Lys Gly Ser Tyr
260 265 270

Ala Ile Pro Gly Asp Cys Gly Pro Pro Leu Ser Asp Leu Leu Lys Gly
275 280 285

Met Leu Glu Tyr Glu Pro Ala Lys Arg Phe Ser Ile Arg Gln Ile Arg
290 295 300

Gln His Ser Trp Phe Arg Lys Lys His Pro Pro Ala Glu Ala Pro Val
305 310 315 320

Pro Ile Pro Pro Ser Pro Asp Thr Lys Asp Arg Trp Arg Ser Met Thr
325 330 335

Val Val Pro Tyr Leu Glu Asp Leu His Gly Ala Asp Glu Asp Glu Asp
340 345 350

Leu Phe Asp Ile Glu Asp Asp Ile Ile Tyr Thr Gln Asp Phe Thr Val
355 360 365

Pro Gly Gln Val Pro Glu Glu Glu Ala Ser His Asn Gly Gln Arg Arg
370 375 380

Gly Leu Pro Lys Ala Val Cys Met Asn Gly Thr Glu Ala Ala Gln Leu
385 390 395 400

Ser Thr Lys Ser Arg Ala Glu Gly Arg Ala Pro Asn Pro Ala Arg Lys
405 410 415

Ala Cys Ser Ala Ser Ser Lys Ile Arg Arg Leu Ser Ala Cys Lys Gln
420 425 430

Gln

<210> 10

<211> 396

<212> PRT

<213> Homo sapiens

<400> 10

Met Pro Arg Val Lys Ala Ala Gln Ala Gly Arg Gln Ser Ser Ala Lys
1 5 10 15

Arg His Leu Ala Glu Gln Phe Ala Val Gly Glu Ile Ile Thr Asp Met
20 25 30

Ala Lys Lys Glu Trp Lys Val Gly Leu Pro Ile Gly Gln Gly Gly Phe

35 40 45

Gly Cys Ile Tyr Leu Ala Asp Met Asn Ser Ser Glu Ser Val Gly Ser

50 55 60

Asp Ala Pro Cys Val Val Lys Val Glu Pro Ser Asp Asn Gly Pro Leu

65 70 75 80

Phe Thr Glu Leu Lys Phe Tyr Gln Arg Ala Ala Lys Pro Glu Gln Ile

85 90 95

Gln Lys Trp Ile Arg Thr Arg Lys Leu Lys Tyr Leu Gly Val Pro Lys

100 105 110

Tyr Trp Gly Ser Gly Leu His Asp Lys Asn Gly Lys Ser Tyr Arg Phe

115 120 125

Met Ile Met Asp Arg Phe Gly Ser Asp Leu Gln Lys Ile Tyr Glu Ala

130 135 140

Asn Ala Lys Arg Phe Ser Arg Lys Thr Val Leu Gln Leu Ser Leu Arg

145 150 155 160

Ile Leu Asp Ile Leu Glu Tyr Ile His Glu His Glu Tyr Val His Gly

165 170 175

Asp Ile Lys Ala Ser Asn Leu Leu Leu Asn Tyr Lys Asn Pro Asp Gln

180 185 190

Val Tyr Leu Val Asp Tyr Gly Leu Ala Tyr Arg Tyr Cys Pro Glu Gly

195 200 205

Val His Lys Glu Tyr Lys Glu Asp Pro Lys Arg Cys His Asp Gly Thr

210 215 220

Ile Glu Phe Thr Ser Ile Asp Ala His Asn Gly Val Ala Pro Ser Arg

225 230 235 240

Arg Gly Asp Leu Glu Ile Leu Gly Tyr Cys Met Ile Gln Trp Leu Thr

245 250 255

Gly His Leu Pro Trp Glu Asp Asn Leu Lys Asp Pro Lys Tyr Val Arg

260 265 270

Asp Ser Lys Ile Arg Tyr Arg Glu Asn Ile Ala Ser Leu Met Asp Lys

275 280 285

Cys Phe Pro Glu Lys Asn Lys Pro Gly Glu Ile Ala Lys Tyr Met Glu

290 295 300

Thr Val Lys Leu Leu Asp Tyr Thr Glu Lys Pro Leu Tyr Glu Asn Leu

305 310 315 320

Arg Asp Ile Leu Leu Gln Gly Leu Lys Ala Ile Gly Ser Lys Asp Asp

325 330 335

Gly Lys Leu Asp Leu Ser Val Val Glu Asn Gly Gly Leu Lys Ala Lys

340 345 350

Thr Ile Thr Lys Lys Arg Lys Lys Glu Ile Glu Glu Ser Lys Glu Pro

355 360 365

Gly Val Glu Asp Thr Glu Trp Ser Asn Thr Gln Thr Glu Glu Ala Ile

370 375 380

Gln Thr Arg Ser Arg Thr Arg Lys Arg Val Gln Lys

385 390 395

<210> 11

<211> 297

<212> PRT

<213> Homo sapiens

<400> 11

Met Glu Asp Tyr Thr Lys Ile Glu Lys Ile Gly Glu Gly Thr Tyr Gly

1 5 10 15

10050065.041202

Val Val Tyr Lys Gly Arg His Lys Thr Thr Gly Gln Val Val Ala Met

20 25 30

Lys Lys Ile Arg Leu Glu Ser Glu Glu Glu Gly Val Pro Ser Thr Ala

35 40 45

Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Arg His Pro Asn Ile Val

50 55 60

Ser Leu Gln Asp Val Leu Met Gln Asp Ser Arg Leu Tyr Leu Ile Phe

65 70 75 80

Glu Phe Leu Ser Met Asp Leu Lys Lys Tyr Leu Asp Ser Ile Pro Pro

85 90 95

Gly Gln Tyr Met Asp Ser Ser Leu Val Lys Ser Tyr Leu Tyr Gln Ile

100 105 110

Leu Gln Gly Ile Val Phe Cys His Ser Arg Arg Val Leu His Arg Asp

115 120 125

Leu Lys Pro Gln Asn Leu Leu Ile Asp Asp Lys Gly Thr Ile Lys Leu

130 135 140

Ala Asp Phe Gly Leu Ala Arg Ala Phe Gly Ile Pro Ile Arg Val Tyr

10050065.012502

145 150 155 160

Thr His Glu Val Val Thr Leu Trp Tyr Arg Ser Pro Glu Val Leu Leu
165 170 175

Gly Ser Ala Arg Tyr Ser Thr Pro Val Asp Ile Trp Ser Ile Gly Thr
180 185 190

Ile Phe Ala Glu Leu Ala Thr Lys Lys Pro Leu Phe His Gly Asp Ser
195 200 205

Glu Ile Asp Gln Leu Phe Arg Ile Phe Arg Ala Leu Gly Thr Pro Asn
210 215 220

Asn Glu Val Trp Pro Glu Val Glu Ser Leu Gln Asp Tyr Lys Asn Thr
225 230 235 240

Phe Pro Lys Trp Lys Pro Gly Ser Leu Ala Ser His Val Lys Asn Leu
245 250 255

Asp Glu Asn Gly Leu Asp Leu Leu Ser Lys Met Leu Ile Tyr Asp Pro
260 265 270

Ala Lys Arg Ile Ser Gly Lys Met Ala Leu Asn His Pro Tyr Phe Asn
275 280 285

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Asp Leu Asp Asn Gln Ile Lys Lys Met
290 295

<210> 12
<211> 403
<212> PRT
<213> Homo sapiens

<400> 12
Met Asp Arg Ser Lys Glu Asn Cys Ile Ser Gly Pro Val Lys Ala Thr
1 5 10 15

Ala Pro Val Gly Gly Pro Lys Arg Val Leu Val Thr Gln Gln Phe Pro
20 25 30

Cys Gln Asn Pro Leu Pro Val Asn Ser Gly Gln Ala Gln Arg Val Leu
35 40 45

Cys Pro Ser Asn Ser Ser Gln Arg Ile Pro Leu Gln Ala Gln Lys Leu
50 55 60

Val Ser Ser His Lys Pro Val Gln Asn Gln Lys Gln Lys Gln Leu Gln
65 70 75 80

Ala Thr Ser Val Pro His Pro Val Ser Arg Pro Leu Asn Asn Thr Gln

85 90 95

Lys Ser Lys Gln Pro Leu Pro Ser Ala Pro Glu Asn Asn Pro Glu Glu

100 105 110

Glu Leu Ala Ser Lys Gln Lys Asn Glu Glu Ser Lys Lys Arg Gln Trp

115 120 125

Ala Leu Glu Asp Phe Glu Ile Gly Arg Pro Leu Gly Lys Gly Lys Phe

130 135 140

Gly Asn Val Tyr Leu Ala Arg Glu Lys Gln Ser Lys Phe Ile Leu Ala

145 150 155 160

Leu Lys Val Leu Phe Lys Ala Gln Leu Glu Lys Ala Gly Val Glu His

165 170 175

Gln Leu Arg Arg Glu Val Glu Ile Gln Ser His Leu Arg His Pro Asn

180 185 190

Ile Leu Arg Leu Tyr Gly Tyr Phe His Asp Ala Thr Arg Val Tyr Leu

195 200 205

Ile Leu Glu Tyr Ala Pro Leu Gly Thr Val Tyr Arg Glu Leu Gln Lys

210 215 220

10050065.012502

Leu Ser Lys Phe Asp Glu Gln Arg Thr Ala Thr Tyr Ile Thr Glu Leu
225 230 235 240

Ala Asn Ala Leu Ser Tyr Cys His Ser Lys Arg Val Ile His Arg Asp
245 250 255

Ile Lys Pro Glu Asn Leu Leu Leu Gly Ser Ala Gly Glu Leu Lys Ile
260 265 270

Ala Asp Phe Gly Trp Ser Val His Ala Pro Ser Ser Arg Arg Thr Thr
275 280 285

Leu Cys Gly Thr Leu Asp Tyr Leu Pro Pro Glu Met Ile Glu Gly Arg
290 295 300

Met His Asp Glu Lys Val Asp Leu Trp Ser Leu Gly Val Leu Cys Tyr
305 310 315 320

Glu Phe Leu Val Gly Lys Pro Pro Phe Glu Ala Asn Thr Tyr Gln Glu
325 330 335

Thr Tyr Lys Arg Ile Ser Arg Val Glu Phe Thr Phe Pro Asp Phe Val
340 345 350

Thr Glu Gly Ala Arg Asp Leu Ile Ser Arg Leu Leu Lys His Asn Pro
355 360 365

Ser Gln Arg Pro Met Leu Arg Glu Val Leu Glu His Pro Trp Ile Thr
370 375 380

Ala Asn Ser Ser Lys Pro Ser Asn Cys Gln Asn Lys Glu Ser Ala Ser
385 390 395 400

Lys Gln Ser

<210> 13
<211> 344
<212> PRT
<213> Homo sapiens

<400> 13
Met Ala Gln Lys Glu Asn Ser Tyr Pro Trp Pro Tyr Gly Arg Gln Thr
1 5 10 15

Ala Pro Ser Gly Leu Ser Thr Leu Pro Gln Arg Val Leu Arg Lys Glu
20 25 30

Pro Val Thr Pro Ser Ala Leu Val Leu Met Ser Arg Ser Asn Val Gln
35 40 45

Pro Thr Ala Ala Pro Gly Gln Lys Val Met Glu Asn Ser Ser Gly Thr

50 55 60

Pro Asp Ile Leu Thr Arg His Phe Thr Ile Asp Asp Phe Glu Ile Gly

65 70 75 80

Arg Pro Leu Gly Lys Gly Lys Phe Gly Asn Val Tyr Leu Ala Arg Glu

85 90 95

Lys Lys Ser His Phe Ile Val Ala Leu Lys Val Leu Phe Lys Ser Gln

100 105 110

Ile Glu Lys Glu Gly Val Glu His Gln Leu Arg Arg Glu Ile Glu Ile

115 120 125

Gln Ala His Leu His His Pro Asn Ile Leu Arg Leu Tyr Asn Tyr Phe

130 135 140

Tyr Asp Arg Arg Arg Ile Tyr Leu Ile Leu Glu Tyr Ala Pro Arg Gly

145 150 155 160

Glu Leu Tyr Lys Glu Leu Gln Lys Ser Cys Thr Phe Asp Glu Gln Arg

165 170 175

Thr Ala Thr Ile Met Glu Glu Leu Ala Asp Ala Leu Met Tyr Cys His

180 185 190

10050095 . 012902

Gly Lys Lys Val Ile His Arg Asp Ile Lys Pro Glu Asn Leu Leu Leu
195 200 205

Gly Leu Lys Gly Glu Leu Lys Ile Ala Asp Phe Gly Trp Ser Val His
210 215 220

Ala Pro Ser Leu Arg Arg Lys Thr Met Cys Gly Thr Leu Asp Tyr Leu
225 230 235 240

Pro Pro Glu Met Ile Glu Gly Arg Met His Asn Glu Lys Val Asp Leu
245 250 255

Trp Cys Ile Gly Val Leu Cys Tyr Glu Leu Leu Val Gly Asn Pro Pro
260 265 270

Phe Glu Ser Ala Ser His Asn Glu Thr Tyr Arg Arg Ile Val Lys Val
275 280 285

Asp Leu Lys Phe Pro Ala Ser Val Pro Thr Gly Ala Gln Asp Leu Ile
290 295 300

Ser Lys Leu Leu Arg His Asn Pro Ser Glu Arg Leu Pro Leu Ala Gln
305 310 315 320

Val Ser Ala His Pro Trp Val Arg Ala Asn Ser Arg Arg Val Leu Pro

10060055.012502

325 330 335

Pro Ser Ala Leu Gln Ser Val Ala
340

<210> 14
<211> 745
<212> PRT
<213> Homo sapiens

<400> 14

Met Glu Arg Pro Pro Gly Leu Arg Pro Gly Ala Gly Gly Pro Trp Glu
1 5 10 15

Met Arg Glu Arg Leu Gly Thr Gly Gly Phe Gly Asn Val Cys Leu Tyr
20 25 30

Gln His Arg Glu Leu Asp Leu Lys Ile Ala Ile Lys Ser Cys Arg Leu
35 40 45

Glu Leu Ser Thr Lys Asn Arg Glu Arg Trp Cys His Glu Ile Gln Ile
50 55 60

Met Lys Lys Leu Asn His Ala Asn Val Val Lys Ala Cys Asp Val Pro
65 70 75 80

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Glu Glu Leu Asn Ile Leu Ile His Asp Val Pro Leu Leu Ala Met Glu
85 90 95

Tyr Cys Ser Gly Gly Asp Leu Arg Lys Leu Leu Asn Lys Pro Glu Asn
100 105 110

Cys Cys Gly Leu Lys Glu Ser Gln Ile Leu Ser Leu Leu Ser Asp Ile
115 120 125

Gly Ser Gly Ile Arg Tyr Leu His Glu Asn Lys Ile Ile His Arg Asp
130 135 140

Leu Lys Pro Glu Asn Ile Val Leu Gln Asp Val Gly Gly Lys Ile Ile
145 150 155 160

His Lys Ile Ile Asp Leu Gly Tyr Ala Lys Asp Val Asp Gln Gly Ser
165 170 175

Leu Cys Thr Ser Phe Val Gly Thr Leu Gln Tyr Leu Ala Pro Glu Leu
180 185 190

Phe Glu Asn Lys Pro Tyr Thr Ala Thr Val Asp Tyr Trp Ser Phe Gly
195 200 205

Thr Met Val Phe Glu Cys Ile Ala Gly Tyr Arg Pro Phe Leu His His

Substitute Sheet (Rule 26)

210 215 220

Leu Gln Pro Phe Thr Trp His Glu Lys Ile Lys Lys Lys Asp Pro Lys
225 230 235 240

Cys Ile Phe Ala Cys Glu Glu Met Ser Gly Glu Val Arg Phe Ser Ser
245 250 255

His Leu Pro Gln Pro Asn Ser Leu Cys Ser Leu Ile Val Glu Pro Met
260 265 270

Glu Asn Trp Leu Gln Leu Met Leu Asn Trp Asp Pro Gln Gln Arg Gly
275 280 285

Gly Pro Val Asp Leu Thr Leu Lys Gln Pro Arg Cys Phe Val Leu Met
290 295 300

Asp His Ile Leu Asn Leu Lys Ile Val His Ile Leu Asn Met Thr Ser
305 310 315 320

Ala Lys Ile Ile Ser Phe Leu Leu Pro Pro Asp Glu Ser Leu His Ser
325 330 335

Leu Gln Ser Arg Ile Glu Arg Glu Thr Gly Ile Asn Thr Gly Ser Gln
340 345 350

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Glu Leu Leu Ser Glu Thr Gly Ile Ser Leu Asp Pro Arg Lys Pro Ala

355 360 365

Ser Gln Cys Val Leu Asp Gly Val Arg Gly Cys Asp Ser Tyr Met Val

370 375 380

Tyr Leu Phe Asp Lys Ser Lys Thr Val Tyr Glu Gly Pro Phe Ala Ser

385 390 395 400

Arg Ser Leu Ser Asp Cys Val Asn Tyr Ile Val Gln Asp Ser Lys Ile

405 410 415

Gln Leu Pro Ile Ile Gln Leu Arg Lys Val Trp Ala Glu Ala Val His

420 425 430

Tyr Val Ser Gly Leu Lys Glu Asp Tyr Ser Arg Leu Phe Gln Gly Gln

435 440 445

Arg Ala Ala Met Leu Ser Leu Leu Arg Tyr Asn Ala Asn Leu Thr Lys

450 455 460

Met Lys Asn Thr Leu Ile Ser Ala Ser Gln Gln Leu Lys Ala Lys Leu

465 470 475 480

Glu Phe Phe His Lys Ser Ile Gln Leu Asp Leu Glu Arg Tyr Ser Glu

485 490 495

Gln Met Thr Tyr Gly Ile Ser Ser Glu Lys Met Leu Lys Ala Trp Lys
500 505 510

Glu Met Glu Glu Lys Ala Ile His Tyr Ala Glu Val Gly Val Ile Gly
515 520 525

Tyr Leu Glu Asp Gln Ile Met Ser Leu His Ala Glu Ile Met Glu Leu
530 535 540

Gln Lys Ser Pro Tyr Gly Arg Arg Gln Gly Asp Leu Met Glu Ser Leu
545 550 555 560

Glu Gln Arg Ala Ile Asp Leu Tyr Lys Gln Leu Lys His Arg Pro Ser
565 570 575

Asp His Ser Tyr Ser Asp Ser Thr Glu Met Val Lys Ile Ile Val His
580 585 590

Thr Val Gln Ser Gln Asp Arg Val Leu Lys Glu Leu Phe Gly His Leu
595 600 605

Ser Lys Leu Leu Gly Cys Lys Gln Lys Ile Ile Asp Leu Leu Pro Lys
610 615 620

Val Glu Val Ala Leu Ser Asn Ile Lys Glu Ala Asp Asn Thr Val Met

10050065.042502

625 630 635 640

Phe Met Gln Gly Lys Arg Gln Lys Glu Ile Trp His Leu Leu Lys Ile

645 650 655

Ala Cys Thr Gln Ser Ser Ala Arg Ser Leu Val Gly Ser Ser Leu Glu

660 665 670

Gly Ala Val Thr Pro Gln Thr Ser Ala Trp Leu Pro Pro Thr Ser Ala

675 680 685

Glu His Asp His Ser Leu Ser Cys Val Val Thr Pro Gln Asp Gly Glu

690 695 700

Thr Ser Ala Gln Met Ile Glu Glu Asn Leu Asn Cys Leu Gly His Leu

705 710 715 720

Ser Thr Ile Ile His Glu Ala Asn Glu Glu Gln Gly Asn Ser Met Met

725 730 735

Asn Leu Asp Trp Ser Trp Leu Thr Glu

740 745

<210> 15

<211> 318

10060065.012502

<212> PRT

<213> Homo sapiens

<400> 15

Met Ser Lys Pro Pro Ala Pro Asn Pro Thr Pro Pro Arg Asn Leu Asp
1 5 10 15

Ser Arg Thr Phe Ile Thr Ile Gly Asp Arg Asn Phe Glu Val Glu Ala
20 25 30

Asp Asp Leu Val Thr Ile Ser Glu Leu Gly Arg Gly Ala Tyr Gly Val
35 40 45

Val Glu Lys Val Arg His Ala Gln Ser Gly Thr Ile Met Ala Val Lys
50 55 60

Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu Leu Met
65 70 75 80

Asp Leu Asp Ile Asn Met Arg Thr Val Asp Cys Phe Tyr Thr Val Thr
85 90 95

Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys Met Glu
100 105 110

Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Arg Lys Val Leu Asp Lys

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115 120 125

Asn Met Thr Ile Pro Glu Asp Ile Leu Gly Glu Ile Ala Val Ser Ile

130 135 140

Val Arg Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile His Arg

145 150 155 160

Asp Val Lys Pro Ser Asn Val Leu Ile Asn Lys Glu Gly His Val Lys

165 170 175

Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val Ala Lys

180 185 190

Thr Met Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg Ile Asn

195 200 205

Pro Glu Leu Asn Gln Lys Gly Tyr Asn Val Lys Ser Asp Val Trp Ser

210 215 220

Leu Gly Ile Thr Met Ile Glu Met Ala Ile Leu Arg Phe Pro Tyr Glu

225 230 235 240

Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu Glu Pro

245 250 255

Ser Pro Gln Leu Pro Ala Asp Arg Phe Ser Pro Glu Phe Val Asp Phe
260 265 270

Thr Ala Gln Cys Leu Arg Lys Asn Pro Ala Glu Arg Met Ser Tyr Leu
275 280 285

Glu Leu Met Glu His Pro Phe Phe Thr Leu His Lys Thr Lys Lys Thr
290 295 300

Asp Ile Ala Ala Phe Val Lys Lys Ile Leu Gly Glu Asp Ser
305 310 315

<210> 16

<211> 379

<212> PRT

<213> Homo sapiens

<400> 16

Met Ala Ala Ala Ala Ala Gln Gly Gly Gly Gly Gly Glu Pro Arg Arg
1 5 10 15

Thr Glu Gly Val Gly Pro Gly Val Pro Gly Glu Val Glu Met Val Lys
20 25 30

Gly Gln Pro Phe Asp Val Gly Pro Arg Tyr Thr Gln Leu Gln Tyr Ile

35 40 45

Gly Glu Gly Ala Tyr Gly Met Val Ser Ser Ala Tyr Asp His Val Arg

50 55 60

Lys Thr Arg Val Ala Ile Lys Lys Ile Ser Pro Phe Glu His Gln Thr

65 70 75 80

Tyr Cys Gln Arg Thr Leu Arg Glu Ile Gln Ile Leu Leu Arg Phe Arg

85 90 95

His Glu Asn Val Ile Gly Ile Arg Asp Ile Leu Arg Ala Ser Thr Leu

100 105 110

Glu Ala Met Arg Asp Val Tyr Ile Val Gln Asp Leu Met Glu Thr Asp

115 120 125

Leu Tyr Lys Leu Leu Lys Ser Gln Gln Leu Ser Asn Asp His Ile Cys

130 135 140

Tyr Phe Leu Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala

145 150 155 160

Asn Val Leu His Arg Asp Leu Lys Pro Ser Asn Leu Leu Ser Asn Thr

165 170 175

10050065.012902

Thr Cys Asp Leu Lys Ile Cys Asp Phe Gly Leu Ala Arg Ile Ala Asp
180 185 190

Pro Glu His Asp His Thr Gly Phe Leu Thr Glu Tyr Val Ala Thr Arg
195 200 205

Trp Tyr Arg Ala Pro Glu Ile Met Leu Asn Ser Lys Gly Tyr Thr Lys
210 215 220

Ser Ile Asp Ile Trp Ser Val Gly Cys Ile Leu Ala Glu Met Leu Ser
225 230 235 240

Asn Arg Pro Ile Phe Pro Gly Lys His Tyr Leu Asp Gln Leu Asn His
245 250 255

Ile Leu Gly Ile Leu Gly Ser Pro Ser Gln Glu Asp Leu Asn Cys Ile
260 265 270

Ile Asn Met Lys Ala Arg Asn Tyr Leu Gln Ser Leu Pro Ser Lys Thr
275 280 285

Lys Val Ala Trp Ala Lys Leu Phe Pro Lys Ser Asp Ser Lys Ala Leu
290 295 300

Asp Leu Leu Asp Arg Met Leu Thr Phe Asn Pro Asn Lys Arg Ile Thr
305 310 315 320

10050065.071202

Val Glu Glu Ala Leu Ala His Pro Tyr Leu Glu Gln Tyr Tyr Asp Pro
325 330 335

Thr Asp Glu Pro Val Ala Glu Glu Pro Phe Thr Phe Ala Met Glu Leu
340 345 350

Asp Asp Leu Pro Lys Glu Arg Leu Lys Glu Leu Ile Phe Gln Glu Thr
355 360 365

Ala Arg Phe Gln Pro Gly Val Leu Glu Ala Pro
370 375

<210> 17

<211> 648

<212> PRT

<213> Homo sapiens

<400> 17

Met Glu His Ile Gln Gly Ala Trp Lys Thr Ile Ser Asn Gly Phe Gly
1 5 10 15

Phe Lys Asp Ala Val Phe Asp Gly Ser Ser Cys Ile Ser Pro Thr Ile
20 25 30

Val Gln Gln Phe Gly Tyr Gln Arg Arg Ala Ser Asp Asp Gly Lys Leu
35 40 45

Thr Asp Pro Ser Lys Thr Ser Asn Thr Ile Arg Val Phe Leu Pro Asn
50 55 60

Lys Gln Arg Thr Val Val Asn Val Arg Asn Gly Met Ser Leu His Asp
65 70 75 80

Cys Leu Met Lys Ala Leu Lys Val Arg Gly Leu Gln Pro Glu Cys Cys
85 90 95

Ala Val Phe Arg Leu Leu His Glu His Lys Gly Lys Lys Ala Arg Leu
100 105 110

Asp Trp Asn Thr Asp Ala Ala Ser Leu Ile Gly Glu Glu Leu Gln Val
115 120 125

Asp Phe Leu Asp His Val Pro Leu Thr Thr His Asn Phe Ala Arg Lys
130 135 140

Thr Phe Leu Lys Leu Ala Phe Cys Asp Ile Cys Gln Lys Phe Leu Leu
145 150 155 160

Asn Gly Phe Arg Cys Gln Thr Cys Gly Tyr Lys Phe His Glu His Cys
165 170 175

Ser Thr Lys Val Pro Thr Met Cys Val Asp Trp Ser Asn Ile Arg Gln
180 185 190

Leu Leu Leu Phe Pro Asn Ser Thr Ile Gly Asp Ser Gly Val Pro Ala
195 200 205

Leu Pro Ser Leu Thr Met Arg Arg Met Arg Glu Ser Val Ser Arg Met
210 215 220

Pro Val Ser Ser Gln His Arg Tyr Ser Thr Pro His Ala Phe Thr Phe
225 230 235 240

Asn Thr Ser Ser Pro Ser Ser Glu Gly Ser Leu Ser Gln Arg Gln Arg
245 250 255

Ser Thr Ser Thr Pro Asn Val His Met Val Ser Thr Thr Leu Pro Val
260 265 270

Asp Ser Arg Met Ile Glu Asp Ala Ile Arg Ser His Ser Glu Ser Ala
275 280 285

Ser Pro Ser Ala Leu Ser Ser Ser Pro Asn Asn Leu Ser Pro Thr Gly
290 295 300

Trp Ser Gln Pro Lys Thr Pro Val Pro Ala Gln Arg Glu Arg Ala Pro

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305 310 315 320

Val Ser Gly Thr Gln Glu Lys Asn Lys Ile Arg Pro Arg Gly Gln Arg

325 330 335

Asp Ser Ser Tyr Tyr Trp Glu Ile Glu Ala Ser Glu Val Met Leu Ser

340 345 350

Thr Arg Ile Gly Ser Gly Ser Phe Gly Thr Val Tyr Lys Gly Lys Trp

355 360 365

His Gly Asp Val Ala Val Lys Ile Leu Lys Val Val Asp Pro Thr Pro

370 375 380

Glu Gln Phe Gln Ala Phe Arg Asn Glu Val Ala Val Leu Arg Lys Thr

385 390 395 400

Arg His Val Asn Ile Leu Leu Phe Met Gly Tyr Met Thr Lys Asp Asn

405 410 415

Leu Ala Ile Val Thr Gln Trp Cys Glu Gly Ser Ser Leu Tyr Lys His

420 425 430

Leu His Val Gln Glu Thr Lys Phe Gln Met Phe Gln Leu Ile Asp Ile

435 440 445

Ala Arg Gln Thr Ala Gln Gly Met Asp Tyr Leu His Ala Lys Asn Ile

450 455 460

Ile His Arg Asp Met Lys Ser Asn Asn Ile Phe Leu His Glu Gly Leu

465 470 475 480

Thr Val Lys Ile Gly Asp Phe Gly Leu Ala Thr Val Lys Ser Arg Trp

485 490 495

Ser Gly Ser Gln Gln Val Glu Gln Pro Thr Gly Ser Val Leu Trp Met

500 505 510

Ala Pro Glu Val Ile Arg Met Gln Asp Asn Asn Pro Phe Ser Phe Gln

515 520 525

Ser Asp Val Tyr Ser Tyr Gly Ile Val Leu Tyr Glu Leu Met Thr Gly

530 535 540

Glu Leu Pro Tyr Ser His Ile Asn Asn Arg Asp Gln Ile Ile Phe Met

545 550 555 560

Val Gly Arg Gly Tyr Ala Ser Pro Asp Leu Ser Lys Leu Tyr Lys Asn

565 570 575

Cys Pro Lys Ala Met Lys Arg Leu Val Ala Asp Cys Val Lys Lys Val

580 585 590

Lys Glu Glu Arg Pro Leu Phe Pro Gln Ile Leu Ser Ser Ile Glu Leu
595 600 605

Leu Gln His Ser Leu Pro Lys Ile Asn Arg Ser Ala Ser Glu Pro Ser
610 615 620

Leu His Arg Ala Ala His Thr Glu Asp Ile Asn Ala Cys Thr Leu Thr
625 630 635 640

Thr Ser Pro Arg Leu Pro Val Phe
645

<210> 18
<211> 480
<212> PRT
<213> Homo sapiens

<400> 18
Met Ser Asp Val Ala Ile Val Lys Glu Gly Trp Leu His Lys Arg Gly
1 5 10 15

Glu Tyr Ile Lys Thr Trp Arg Pro Arg Tyr Phe Leu Leu Lys Asn Asp
20 25 30

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Gly Thr Phe Ile Gly Tyr Lys Glu Arg Pro Gln Asp Val Asp Gln Arg
35 40 45

Glu Ala Pro Leu Asn Asn Phe Ser Val Ala Gln Cys Gln Leu Met Lys
50 55 60

Thr Glu Arg Pro Arg Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp
65 70 75 80

Thr Thr Val Ile Glu Arg Thr Phe His Val Glu Thr Pro Glu Glu Arg
85 90 95

Glu Glu Trp Thr Thr Ala Ile Gln Thr Val Ala Asp Gly Leu Lys Lys
100 105 110

Gln Glu Glu Glu Glu Met Asp Phe Arg Ser Gly Ser Pro Ser Asp Asn
115 120 125

Ser Gly Ala Glu Glu Met Glu Val Ser Leu Ala Lys Pro Lys His Arg
130 135 140

Val Thr Met Asn Glu Phe Glu Tyr Leu Lys Leu Leu Gly Lys Gly Thr
145 150 155 160

Phe Gly Lys Val Ile Leu Val Lys Glu Lys Ala Thr Gly Arg Tyr Tyr
165 170 175

10050065.012502

Ala Met Lys Ile Leu Lys Lys Glu Val Ile Val Ala Lys Asp Glu Val

180 185 190

Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln Asn Ser Arg His Pro

195 200 205

Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys

210 215 220

Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser

225 230 235 240

Arg Glu Arg Val Phe Ser Glu Asp Arg Ala Arg Phe Tyr Gly Ala Glu

245 250 255

Ile Val Ser Ala Leu Asp Tyr Leu His Ser Glu Lys Asn Val Val Tyr

260 265 270

Arg Asp Leu Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile

275 280 285

Lys Ile Thr Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala

290 295 300

Thr Met Lys Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val

305 310 315 320

Leu Glu Asp Asn Asp Tyr Gly Arg Ala Val Asp Trp Trp Gly Leu Gly
325 330 335

Val Val Met Tyr Glu Met Met Cys Gly Arg Leu Pro Phe Tyr Asn Gln
340 345 350

Asp His Glu Lys Leu Phe Glu Leu Ile Leu Met Glu Glu Ile Arg Phe
355 360 365

Pro Arg Thr Leu Gly Pro Glu Ala Lys Ser Leu Leu Ser Gly Leu Leu
370 375 380

Lys Lys Asp Pro Lys Gln Arg Leu Gly Gly Gly Ser Glu Asp Ala Lys
385 390 395 400

Glu Ile Met Gln His Arg Phe Phe Ala Gly Ile Val Trp Gln His Val
405 410 415

Tyr Glu Lys Lys Leu Ser Pro Pro Phe Lys Pro Gln Val Thr Ser Glu
420 425 430

Thr Asp Thr Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Met Ile Thr
435 440 445

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Ile Thr Pro Pro Asp Gln Asp Asp Ser Met Glu Cys Val Asp Ser Glu

450 455 460

Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Ser Thr Ala

465 470 475 480

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<212> PRT

<213> Homo sapiens

<400> 19

Met Ser Ala Glu Gly Tyr Gln Tyr Arg Ala Leu Tyr Asp Tyr Lys Lys

1 5 10 15

Glu Arg Glu Glu Asp Ile Asp Leu His Leu Gly Asp Ile Leu Thr Val

20 25 30

Asn Lys Gly Ser Leu Val Ala Leu Gly Phe Ser Asp Gly Gln Glu Ala

35 40 45

Arg Pro Glu Glu Ile Gly Trp Leu Asn Gly Tyr Asn Glu Thr Thr Gly

50 55 60

Glu Arg Gly Asp Phe Pro Gly Thr Tyr Val Glu Tyr Ile Gly Arg Lys

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65 70 75 80

Lys Ile Ser Pro Pro Thr Pro Lys Pro Arg Pro Pro Arg Pro Leu Pro

85 90 95

Val Ala Pro Gly Ser Ser Lys Thr Glu Ala Asp Val Glu Gln Gln Ala

100 105 110

Leu Thr Leu Pro Asp Leu Ala Glu Gln Phe Ala Pro Pro Asp Ile Ala

115 120 125

Pro Pro Leu Leu Ile Lys Leu Val Glu Ala Ile Glu Lys Lys Gly Leu

130 135 140

Glu Cys Ser Thr Leu Tyr Arg Thr Gln Ser Ser Ser Asn Leu Ala Glu

145 150 155 160

Leu Arg Gln Leu Leu Asp Cys Asp Thr Pro Ser Val Asp Leu Glu Met

165 170 175

Ile Asp Val His Val Leu Ala Asp Ala Phe Lys Arg Tyr Leu Leu Asp

180 185 190

Leu Pro Asn Pro Val Ile Pro Ala Ala Val Tyr Ser Glu Met Ile Ser

195 200 205

10060065.041202

Leu Ala Pro Glu Val Gln Ser Ser Glu Glu Tyr Ile Gln Leu Leu Lys
210 215 220

Lys Leu Ile Arg Ser Pro Ser Ile Pro His Gln Tyr Trp Leu Thr Leu
225 230 235 240

Gln Tyr Leu Leu Lys His Phe Phe Lys Leu Ser Gln Thr Ser Ser Lys
245 250 255

Asn Leu Leu Asn Ala Arg Val Leu Ser Glu Ile Phe Ser Pro Met Leu
260 265 270

Phe Arg Phe Ser Ala Ala Ser Ser Asp Asn Thr Glu Asn Leu Ile Lys
275 280 285

Val Ile Glu Ile Leu Ile Ser Thr Glu Trp Asn Glu Arg Gln Pro Ala
290 295 300

Pro Ala Leu Pro Pro Lys Pro Pro Lys Pro Thr Thr Val Ala Asn Asn
305 310 315 320

Gly Met Asn Asn Asn Met Ser Leu Gln Asn Ala Glu Trp Tyr Trp Gly
325 330 335

Asp Ile Ser Arg Glu Glu Val Asn Glu Lys Leu Arg Asp Thr Ala Asp
340 345 350

10069065.041202

Gly Thr Phe Leu Val Arg Asp Ala Ser Thr Lys Met His Gly Asp Tyr
355 360 365

Thr Leu Thr Leu Arg Lys Gly Gly Asn Asn Lys Leu Ile Lys Ile Phe
370 375 380

His Arg Asp Gly Lys Tyr Gly Phe Ser Asp Pro Leu Thr Phe Ser Ser
385 390 395 400

Val Val Glu Leu Ile Asn His Tyr Arg Asn Glu Ser Leu Ala Gln Tyr
405 410 415

Asn Pro Lys Leu Asp Val Lys Leu Leu Tyr Pro Val Ser Lys Tyr Gln
420 425 430

Gln Asp Gln Val Val Lys Glu Asp Asn Ile Glu Ala Val Gly Lys Lys
435 440 445

Leu His Glu Tyr Asn Thr Gln Phe Gln Glu Lys Ser Arg Glu Tyr Asp
450 455 460

Arg Leu Tyr Glu Glu Tyr Thr Arg Thr Ser Gln Glu Ile Gln Met Lys
465 470 475 480

Arg Thr Ala Ile Glu Ala Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu

EP0605954A2

485 490 495

Gln Cys Gln Thr Gln Glu Arg Tyr Ser Lys Glu Tyr Ile Glu Lys Phe
500 505 510

Lys Arg Glu Gly Asn Glu Lys Glu Ile Gln Arg Ile Met His Asn Tyr
515 520 525

Asp Lys Leu Lys Ser Arg Ile Ser Glu Ile Ile Asp Ser Arg Arg Arg
530 535 540

Leu Glu Glu Asp Leu Lys Lys Gln Ala Ala Glu Tyr Arg Glu Ile Asp
545 550 555 560

Lys Arg Met Asn Ser Ile Lys Pro Asp Leu Ile Gln Leu Arg Lys Thr
565 570 575

Arg Asp Gln Tyr Leu Met Trp Leu Thr Gln Lys Gly Val Arg Gln Lys
580 585 590

Lys Leu Asn Glu Trp Leu Gly Asn Glu Asn Thr Glu Asp Gln Tyr Ser
595 600 605

Leu Val Glu Asp Asp Glu Asp Leu Pro His His Asp Glu Lys Thr Trp
610 615 620

EP0668351A2

Asn Val Gly Ser Ser Asn Arg Asn Lys Ala Glu Asn Leu Leu Arg Gly
625 630 635 640

Lys Arg Asp Gly Thr Phe Leu Val Arg Glu Ser Ser Lys Gln Gly Cys
645 650 655

Tyr Ala Cys Ser Val Val Val Asp Gly Glu Val Lys His Cys Val Ile
660 665 670

Asn Lys Thr Ala Thr Gly Tyr Gly Phe Ala Glu Pro Tyr Asn Leu Tyr
675 680 685

Ser Ser Leu Lys Glu Leu Val Leu His Tyr Gln His Thr Ser Leu Val
690 695 700

Gln His Asn Asp Ser Leu Asn Val Thr Leu Ala Tyr Pro Val Tyr Ala
705 710 715 720

Gln Gln Arg Arg

<210> 20

<211> 3056

<212> PRT

<213> Homo sapiens

<400> 20

Met Ser Leu Val Leu Asn Asp Leu Leu Ile Cys Cys Arg Gln Leu Glu
1 5 10 15

His Asp Arg Ala Thr Glu Arg Lys Lys Glu Val Glu Lys Phe Lys Arg
20 25 30

Leu Ile Arg Asp Pro Glu Thr Ile Lys His Leu Asp Arg His Ser Asp
35 40 45

Ser Lys Gln Gly Lys Tyr Leu Asn Trp Asp Ala Val Phe Arg Phe Leu
50 55 60

Gln Lys Tyr Ile Gln Lys Glu Thr Glu Cys Leu Arg Ile Ala Lys Pro
65 70 75 80

Asn Val Ser Ala Ser Thr Gln Ala Ser Arg Gln Lys Lys Met Gln Glu
85 90 95

Ile Ser Ser Leu Val Lys Tyr Phe Ile Lys Cys Ala Asn Arg Arg Ala
100 105 110

Pro Arg Leu Lys Cys Gln Glu Leu Leu Asn Tyr Ile Met Asp Thr Val
115 120 125

1005005-081202

Lys Asp Ser Ser Asn Gly Ala Ile Tyr Gly Ala Asp Cys Ser Asn Ile

130 135 140

Leu Leu Lys Asp Ile Leu Ser Val Arg Lys Tyr Trp Cys Glu Ile Ser

145 150 155 160

Gln Gln Gln Trp Leu Glu Leu Phe Ser Val Tyr Phe Arg Leu Tyr Leu

165 170 175

Lys Pro Ser Gln Asp Val His Arg Val Leu Val Ala Arg Ile Ile His

180 185 190

Ala Val Thr Lys Gly Cys Cys Ser Gln Thr Asp Gly Leu Asn Ser Lys

195 200 205

Phe Leu Asp Phe Phe Ser Lys Ala Ile Gln Cys Ala Arg Gln Glu Lys

210 215 220

Ser Ser Ser Gly Leu Asn His Ile Leu Ala Ala Leu Thr Ile Phe Leu

225 230 235 240

Lys Thr Leu Ala Val Asn Phe Arg Ile Arg Val Cys Glu Leu Gly Asp

245 250 255

Glu Ile Leu Pro Thr Leu Leu Tyr Ile Trp Thr Gln His Arg Leu Asn

260 265 270

10050065.012502

Asp Ser Leu Lys Glu Val Ile Ile Glu Leu Phe Gln Leu Gln Ile Tyr

275 280 285

Ile His His Pro Lys Gly Ala Lys Thr Gln Glu Lys Gly Ala Tyr Glu

290 295 300

Ser Thr Lys Trp Arg Ser Ile Leu Tyr Asn Leu Tyr Asp Leu Leu Val

305 310 315 320

Asn Glu Ile Ser His Ile Gly Ser Arg Gly Lys Tyr Ser Ser Gly Phe

325 330 335

Arg Asn Ile Ala Val Lys Glu Asn Leu Ile Glu Leu Met Ala Asp Ile

340 345 350

Cys His Gln Val Phe Asn Glu Asp Thr Arg Ser Leu Glu Ile Ser Gln

355 360 365

Ser Tyr Thr Thr Thr Gln Arg Glu Ser Ser Asp Tyr Ser Val Pro Cys

370 375 380

Lys Arg Lys Lys Ile Glu Leu Gly Trp Glu Val Ile Lys Asp His Leu

385 390 395 400

Gln Lys Ser Gln Asn Asp Phe Asp Leu Val Pro Trp Leu Gln Ile Ala

10050065.042502

405 410 415

Thr Gln Leu Ile Ser Lys Tyr Pro Ala Ser Leu Pro Asn Cys Glu Leu

420 425 430

Ser Pro Leu Leu Met Ile Leu Ser Gln Leu Leu Pro Gln Gln Arg His

435 440 445

Gly Glu Arg Thr Pro Tyr Val Leu Arg Cys Leu Thr Glu Val Ala Leu

450 455 460

Cys Gln Asp Lys Arg Ser Asn Leu Glu Ser Ser Gln Lys Ser Asp Leu

465 470 475 480

Leu Lys Leu Trp Asn Lys Ile Trp Cys Ile Thr Phe Arg Gly Ile Ser

485 490 495

Ser Glu Gln Ile Gln Ala Glu Asn Phe Gly Leu Leu Gly Ala Ile Ile

500 505 510

Gln Gly Ser Leu Val Glu Val Asp Arg Glu Phe Trp Lys Leu Phe Thr

515 520 525

Gly Ser Ala Cys Arg Pro Ser Cys Pro Ala Val Cys Cys Leu Thr Leu

530 535 540

Ala Leu Thr Thr Ser Ile Val Pro Gly Ala Val Lys Met Gly Ile Glu
545 550 555 560

Gln Asn Met Cys Glu Val Asn Arg Ser Phe Ser Leu Lys Glu Ser Ile
565 570 575

Met Lys Trp Leu Leu Phe Tyr Gln Leu Glu Gly Asp Leu Glu Asn Ser
580 585 590

Thr Glu Val Pro Pro Ile Leu His Ser Asn Phe Pro His Leu Val Leu
595 600 605

Glu Lys Ile Leu Val Ser Leu Thr Met Lys Asn Cys Lys Ala Ala Met
610 615 620

Asn Phe Phe Gln Ser Val Pro Glu Cys Glu His His Gln Lys Asp Lys
625 630 635 640

Glu Glu Leu Ser Phe Ser Glu Val Glu Glu Leu Phe Leu Gln Thr Thr
645 650 655

Phe Asp Lys Met Asp Phe Leu Thr Ile Val Arg Glu Cys Gly Ile Glu
660 665 670

Lys His Gln Ser Ser Ile Gly Phe Ser Val His Gln Asn Leu Lys Glu
675 680 685

EP 0 905 150 A1

Ser Leu Asp Arg Cys Leu Leu Gly Leu Ser Glu Gln Leu Leu Asn Asn
690 695 700

Tyr Ser Ser Glu Ile Thr Asn Ser Glu Thr Leu Val Arg Cys Ser Arg
705 710 715 720

Leu Leu Val Gly Val Leu Gly Cys Tyr Cys Tyr Met Gly Val Ile Ala
725 730 735

Glu Glu Glu Ala Tyr Lys Ser Glu Leu Phe Gln Lys Ala Asn Ser Leu
740 745 750

Met Gln Cys Ala Gly Glu Ser Ile Thr Leu Phe Lys Asn Lys Thr Asn
755 760 765

Glu Glu Phe Arg Ile Gly Ser Leu Arg Asn Met Met Gln Leu Cys Thr
770 775 780

Arg Cys Leu Ser Asn Cys Thr Lys Lys Ser Pro Asn Lys Ile Ala Ser
785 790 795 800

Gly Phe Phe Leu Arg Leu Leu Thr Ser Lys Leu Met Asn Asp Ile Ala
805 810 815

Asp Ile Cys Lys Ser Leu Ala Ser Phe Ile Lys Lys Pro Phe Asp Arg

EP0905138A1

820 825 830

Gly Glu Val Glu Ser Met Glu Asp Asp Thr Asn Gly Asn Leu Met Glu

835 840 845

Val Glu Asp Gln Ser Ser Met Asn Leu Phe Asn Asp Tyr Pro Asp Ser

850 855 860

Ser Val Ser Asp Ala Asn Glu Pro Gly Glu Ser Gln Ser Thr Ile Gly

865 870 875 880

Ala Ile Asn Pro Leu Ala Glu Glu Tyr Leu Ser Lys Gln Asp Leu Leu

885 890 895

Phe Leu Asp Met Leu Lys Phe Leu Cys Leu Cys Val Thr Thr Ala Gln

900 905 910

Thr Asn Thr Val Ser Phe Arg Ala Ala Asp Ile Arg Arg Lys Leu Leu

915 920 925

Met Leu Ile Asp Ser Ser Thr Leu Glu Pro Thr Lys Ser Leu His Leu

930 935 940

His Met Tyr Leu Met Leu Leu Lys Glu Leu Pro Gly Glu Glu Tyr Pro

945 950 955 960

10050065.072902

Leu Pro Met Glu Asp Val Leu Glu Leu Leu Lys Pro Leu Ser Asn Val

965 970 975

Cys Ser Leu Tyr Arg Arg Asp Gln Asp Val Cys Lys Thr Ile Leu Asn

980 985 990

His Val Leu His Val Val Lys Asn Leu Gly Gln Ser Asn Met Asp Ser

995 1000 1005

Glu Asn Thr Arg Asp Ala Gln Gly Gln Phe Leu Thr Val Ile Gly Ala

1010 1015 1020

Phe Trp His Leu Thr Lys Glu Arg Lys Tyr Ile Phe Ser Val Arg Met

1025 1030 1035 1040

Ala Leu Val Asn Cys Leu Lys Thr Leu Leu Glu Ala Asp Pro Tyr Ser

1045 1050 1055

Lys Trp Ala Ile Leu Asn Val Met Gly Lys Asp Phe Pro Val Asn Glu

1060 1065 1070

Val Phe Thr Gln Phe Leu Ala Asp Asn His His Gln Val Arg Met Leu

1075 1080 1085

Ala Ala Glu Ser Ile Asn Arg Leu Phe Gln Asp Thr Lys Gly Asp Ser

1090 1095 1100

10050065.041202

Ser Arg Leu Leu Lys Ala Leu Pro Leu Lys Leu Gln Gln Thr Ala Phe
1105 1110 1115 1120

Glu Asn Ala Tyr Leu Lys Ala Gln Glu Gly Met Arg Glu Met Ser His
1125 1130 1135

Ser Ala Glu Asn Pro Glu Thr Leu Asp Glu Ile Tyr Asn Arg Lys Ser
1140 1145 1150

Val Leu Leu Thr Leu Ile Ala Val Val Leu Ser Cys Ser Pro Ile Cys
1155 1160 1165

Glu Lys Gln Ala Leu Phe Ala Leu Cys Lys Ser Val Lys Glu Asn Gly
1170 1175 1180

Leu Glu Pro His Leu Val Lys Lys Val Leu Glu Lys Val Ser Glu Thr
1185 1190 1195 1200

Phe Gly Tyr Arg Arg Leu Glu Asp Phe Met Ala Ser His Leu Asp Tyr
1205 1210 1215

Leu Val Leu Glu Trp Leu Asn Leu Gln Asp Thr Glu Tyr Asn Leu Ser
1220 1225 1230

Ser Phe Pro Phe Ile Leu Leu Asn Tyr Thr Asn Ile Glu Asp Phe Tyr

SUBSTITUTE SHEET (RULE 26)

1235 1240 1245

Arg Ser Cys Tyr Lys Val Leu Ile Pro His Leu Val Ile Arg Ser His

1250 1255 1260

Phe Asp Glu Val Lys Ser Ile Ala Asn Gln Ile Gln Glu Asp Trp Lys

1265 1270 1275 1280

Ser Leu Leu Thr Asp Cys Phe Pro Lys Ile Leu Val Asn Ile Leu Pro

1285 1290 1295

Tyr Phe Ala Tyr Glu Gly Thr Arg Asp Ser Gly Met Ala Gln Gln Arg

1300 1305 1310

Glu Thr Ala Thr Lys Val Tyr Asp Met Leu Lys Ser Glu Asn Leu Leu

1315 1320 1325

Gly Lys Gln Ile Asp His Leu Phe Ile Ser Asn Leu Pro Glu Ile Val

1330 1335 1340

Val Glu Leu Leu Met Thr Leu His Glu Pro Ala Asn Ser Ser Ala Ser

1345 1350 1355 1360

Gln Ser Thr Asp Leu Cys Asp Phe Ser Gly Asp Leu Asp Pro Ala Pro

1365 1370 1375

Asn Pro Pro His Phe Pro Ser His Val Ile Lys Ala Thr Phe Ala Tyr
1380 1385 1390

Ile Ser Asn Cys His Lys Thr Lys Leu Lys Ser Ile Leu Glu Ile Leu
1395 1400 1405

Ser Lys Ser Pro Asp Ser Tyr Gln Lys Ile Leu Leu Ala Ile Cys Glu
1410 1415 1420

Gln Ala Ala Glu Thr Asn Asn Val Tyr Lys Lys His Arg Ile Leu Lys
1425 1430 1435 1440

Ile Tyr His Leu Phe Val Ser Leu Leu Leu Lys Asp Ile Lys Ser Gly
1445 1450 1455

Leu Gly Gly Ala Trp Ala Phe Val Leu Arg Asp Val Ile Tyr Thr Leu
1460 1465 1470

Ile His Tyr Ile Asn Gln Arg Pro Ser Cys Ile Met Asp Val Ser Leu
1475 1480 1485

Arg Ser Phe Ser Leu Cys Cys Asp Leu Leu Ser Gln Val Cys Gln Thr
1490 1495 1500

Ala Val Thr Tyr Cys Lys Asp Ala Leu Glu Asn His Leu His Val Ile
1505 1510 1515 1520

10050065.041202

Val Gly Thr Leu Ile Pro Leu Val Tyr Glu Gln Val Glu Val Gln Lys

1525 1530 1535

Gln Val Leu Asp Leu Leu Lys Tyr Leu Val Ile Asp Asn Lys Asp Asn

1540 1545 1550

Glu Asn Leu Tyr Ile Thr Ile Lys Leu Leu Asp Pro Phe Pro Asp His

1555 1560 1565

Val Val Phe Lys Asp Leu Arg Ile Thr Gln Gln Lys Ile Lys Tyr Ser

1570 1575 1580

Arg Gly Pro Phe Ser Leu Leu Glu Glu Ile Asn His Phe Leu Ser Val

1585 1590 1595 1600

Ser Val Tyr Asp Ala Leu Pro Leu Thr Arg Leu Glu Gly Leu Lys Asp

1605 1610 1615

Leu Arg Arg Gln Leu Glu Leu His Lys Asp Gln Met Val Asp Ile Met

1620 1625 1630

Arg Ala Ser Gln Asp Asn Pro Gln Asp Gly Ile Met Val Lys Leu Val

1635 1640 1645

Val Asn Leu Leu Gln Leu Ser Lys Met Ala Ile Asn His Thr Gly Glu

10550065.042502

1650 1655 1660

Lys Glu Val Leu Glu Ala Val Gly Ser Cys Leu Gly Glu Val Gly Pro
1665 1670 1675 1680

Ile Asp Phe Ser Thr Ile Ala Ile Gln His Ser Lys Asp Ala Ser Tyr
1685 1690 1695

Thr Lys Ala Leu Lys Leu Phe Glu Asp Lys Glu Leu Gln Trp Thr Phe
1700 1705 1710

Ile Met Leu Thr Tyr Leu Asn Asn Thr Leu Val Glu Asp Cys Val Lys
1715 1720 1725

Val Arg Ser Ala Ala Val Thr Cys Leu Lys Asn Ile Leu Ala Thr Lys
1730 1735 1740

Thr Gly His Ser Phe Trp Glu Ile Tyr Lys Met Thr Thr Asp Pro Met
1745 1750 1755 1760

Leu Ala Tyr Leu Gln Pro Phe Arg Thr Ser Arg Lys Lys Phe Leu Glu
1765 1770 1775

Val Pro Arg Phe Asp Lys Glu Asn Pro Phe Glu Gly Leu Asp Asp Ile
1780 1785 1790

EP 0 605 522 B1

Asn Leu Trp Ile Pro Leu Ser Glu Asn His Asp Ile Trp Ile Lys Thr

1795 1800 1805

Leu Thr Cys Ala Phe Leu Asp Ser Gly Gly Thr Lys Cys Glu Ile Leu

1810 1815 1820

Gln Leu Leu Lys Pro Met Cys Glu Val Lys Thr Asp Phe Cys Gln Thr

1825 1830 1835 1840

Val Leu Pro Tyr Leu Ile His Asp Ile Leu Leu Gln Asp Thr Asn Glu

1845 1850 1855

Ser Trp Arg Asn Leu Leu Ser Thr His Val Gln Gly Phe Phe Thr Ser

1860 1865 1870

Cys Leu Arg His Phe Ser Gln Thr Ser Arg Ser Thr Thr Pro Ala Asn

1875 1880 1885

Leu Asp Ser Glu Ser Glu His Phe Phe Arg Cys Cys Leu Asp Lys Lys

1890 1895 1900

Ser Gln Arg Thr Met Leu Ala Val Val Asp Tyr Met Arg Arg Gln Lys

1905 1910 1915 1920

Arg Pro Ser Ser Gly Thr Ile Phe Asn Asp Ala Phe Trp Leu Asp Leu

1925 1930 1935

10050055.041202

Asn Tyr Leu Glu Val Ala Lys Val Ala Gln Ser Cys Ala Ala His Phe
1940 1945 1950

Thr Ala Leu Leu Tyr Ala Glu Ile Tyr Ala Asp Lys Lys Ser Met Asp
1955 1960 1965

Asp Gln Glu Lys Arg Ser Leu Ala Phe Glu Glu Gly Ser Gln Ser Thr
1970 1975 1980

Thr Ile Ser Ser Leu Ser Glu Lys Ser Lys Glu Glu Thr Gly Ile Ser
1985 1990 1995 2000

Leu Gln Asp Leu Leu Leu Glu Ile Tyr Arg Ser Ile Gly Glu Pro Asp
2005 2010 2015

Ser Leu Tyr Gly Cys Gly Gly Gly Lys Met Leu Gln Pro Ile Thr Arg
2020 2025 2030

Leu Arg Thr Tyr Glu His Glu Ala Met Trp Gly Lys Ala Leu Val Thr
2035 2040 2045

Tyr Asp Leu Glu Thr Ala Ile Pro Ser Ser Thr Arg Gln Ala Gly Ile
2050 2055 2060

Ile Gln Ala Leu Gln Asn Leu Gly Leu Cys His Ile Leu Ser Val Tyr

10050065.012502

2065 2070 2075 2080

Leu Lys Gly Leu Asp Tyr Glu Asn Lys Asp Trp Cys Pro Glu Leu Glu

2085 2090 2095

Glu Leu His Tyr Gln Ala Ala Trp Arg Asn Met Gln Trp Asp His Cys

2100 2105 2110

Thr Ser Val Ser Lys Glu Val Glu Gly Thr Ser Tyr His Glu Ser Leu

2115 2120 2125

Tyr Asn Ala Leu Gln Ser Leu Arg Asp Arg Glu Phe Ser Thr Phe Tyr

2130 2135 2140

Glu Ser Leu Lys Tyr Ala Arg Val Lys Glu Val Glu Glu Met Cys Lys

2145 2150 2155 2160

Arg Ser Leu Glu Ser Val Tyr Ser Leu Tyr Pro Thr Leu Ser Arg Leu

2165 2170 2175

Gln Ala Ile Gly Glu Leu Glu Ser Ile Gly Glu Leu Phe Ser Arg Ser

2180 2185 2190

Val Thr His Arg Gln Leu Ser Glu Val Tyr Ile Lys Trp Gln Lys His

2195 2200 2205

Ser Gln Leu Leu Lys Asp Ser Asp Phe Ser Phe Gln Glu Pro Ile Met
2210 2215 2220

Ala Leu Arg Thr Val Ile Leu Glu Ile Leu Met Glu Lys Glu Met Asp
2225 2230 2235 2240

Asn Ser Gln Arg Glu Cys Ile Lys Asp Ile Leu Thr Lys His Leu Val
2245 2250 2255

Glu Leu Ser Ile Leu Ala Arg Thr Phe Lys Asn Thr Gln Leu Pro Glu
2260 2265 2270

Arg Ala Ile Phe Gln Ile Lys Gln Tyr Asn Ser Val Ser Cys Gly Val
2275 2280 2285

Ser Glu Trp Gln Leu Glu Glu Ala Gln Val Phe Trp Ala Lys Lys Glu
2290 2295 2300

Gln Ser Leu Ala Leu Ser Ile Leu Lys Gln Met Ile Lys Lys Leu Asp
2305 2310 2315 2320

Ala Ser Cys Ala Ala Asn Asn Pro Ser Leu Lys Leu Thr Tyr Thr Glu
2325 2330 2335

Cys Leu Arg Val Cys Gly Asn Trp Leu Ala Glu Thr Cys Leu Glu Asn
2340 2345 2350

Pro Ala Val Ile Met Gln Thr Tyr Leu Glu Lys Ala Val Glu Val Ala
2355 2360 2365

Gly Asn Tyr Asp Gly Glu Ser Ser Asp Glu Leu Arg Asn Gly Lys Met
2370 2375 2380

Lys Ala Phe Leu Ser Leu Ala Arg Phe Ser Asp Thr Gln Tyr Gln Arg
2385 2390 2395 2400

Ile Glu Asn Tyr Met Lys Ser Ser Glu Phe Glu Asn Lys Gln Ala Leu
2405 2410 2415

Leu Lys Arg Ala Lys Glu Glu Val Gly Leu Leu Arg Glu His Lys Ile
2420 2425 2430

Gln Thr Asn Arg Tyr Thr Val Lys Val Gln Arg Glu Leu Glu Leu Asp
2435 2440 2445

Glu Leu Ala Leu Arg Ala Leu Lys Glu Asp Arg Lys Arg Phe Leu Cys
2450 2455 2460

Lys Ala Val Glu Asn Tyr Ile Asn Cys Leu Leu Ser Gly Glu Glu His
2465 2470 2475 2480

Asp Met Trp Val Phe Arg Leu Cys Ser Leu Trp Leu Glu Asn Ser Gly

10050065.012502

2485 2490 2495

Val Ser Glu Val Asn Gly Met Met Lys Arg Asp Gly Met Lys Ile Pro
2500 2505 2510

Thr Tyr Lys Phe Leu Pro Leu Met Tyr Gln Leu Ala Ala Arg Met Gly
2515 2520 2525

Thr Lys Met Met Gly Gly Leu Gly Phe His Glu Val Leu Asn Asn Leu
2530 2535 2540

Ile Ser Arg Ile Ser Met Asp His Pro His His Thr Leu Phe Ile Ile
2545 2550 2555 2560

Leu Ala Leu Ala Asn Ala Asn Arg Asp Glu Phe Leu Thr Lys Pro Glu
2565 2570 2575

Val Ala Arg Arg Ser Arg Ile Thr Lys Asn Val Pro Lys Gln Ser Ser
2580 2585 2590

Gln Leu Asp Glu Asp Arg Thr Glu Ala Ala Asn Arg Ile Ile Cys Thr
2595 2600 2605

Ile Arg Ser Arg Arg Pro Gln Met Val Arg Ser Val Glu Ala Leu Cys
2610 2615 2620

EP0905150A1

Asp Ala Tyr Ile Ile Leu Ala Asn Leu Asp Ala Thr Gln Trp Lys Thr
2625 2630 2635 2640

Gln Arg Lys Gly Ile Asn Ile Pro Ala Asp Gln Pro Ile Thr Lys Leu
2645 2650 2655

Lys Asn Leu Glu Asp Val Val Val Pro Thr Met Glu Ile Lys Val Asp
2660 2665 2670

His Thr Gly Glu Tyr Gly Asn Leu Val Thr Ile Gln Ser Phe Lys Ala
2675 2680 2685

Glu Phe Arg Leu Ala Gly Gly Val Asn Leu Pro Lys Ile Ile Asp Cys
2690 2695 2700

Val Gly Ser Asp Gly Lys Glu Arg Arg Gln Leu Val Lys Gly Arg Asp
2705 2710 2715 2720

Asp Leu Arg Gln Asp Ala Val Met Gln Gln Val Phe Gln Met Cys Asn
2725 2730 2735

Thr Leu Leu Gln Arg Asn Thr Glu Thr Arg Lys Arg Lys Leu Thr Ile
2740 2745 2750

Cys Thr Tyr Lys Val Val Pro Leu Ser Gln Arg Ser Gly Val Leu Glu
2755 2760 2765

Trp Cys Thr Gly Thr Val Pro Ile Gly Glu Phe Leu Val Asn Asn Glu
2770 2775 2780

Asp Gly Ala His Lys Arg Tyr Arg Pro Asn Asp Phe Ser Ala Phe Gln
2785 2790 2795 2800

Cys Gln Lys Lys Met Met Glu Val Gln Lys Lys Ser Phe Glu Glu Lys
2805 2810 2815

Tyr Glu Val Phe Met Asp Val Cys Gln Asn Phe Gln Pro Val Phe Arg
2820 2825 2830

Tyr Phe Cys Met Glu Lys Phe Leu Asp Pro Ala Ile Trp Phe Glu Lys
2835 2840 2845

Arg Leu Ala Tyr Thr Arg Ser Val Ala Thr Ser Ser Ile Val Gly Tyr
2850 2855 2860

Ile Leu Gly Leu Gly Asp Arg His Val Gln Asn Ile Leu Ile Asn Glu
2865 2870 2875 2880

Gln Ser Ala Glu Leu Val His Ile Asp Leu Gly Val Ala Phe Glu Gln
2885 2890 2895

Gly Lys Ile Leu Pro Thr Pro Glu Thr Val Pro Phe Arg Leu Thr Arg

2900 2905 2910

Asp Ile Val Asp Gly Met Gly Ile Thr Gly Val Glu Gly Val Phe Arg
2915 2920 2925

Arg Cys Cys Glu Lys Thr Met Glu Val Met Arg Asn Ser Gln Glu Thr
2930 2935 2940

Leu Leu Thr Ile Val Glu Val Leu Leu Tyr Asp Pro Leu Phe Asp Trp
2945 2950 2955 2960

Thr Met Asn Pro Leu Lys Ala Leu Tyr Leu Gln Gln Arg Pro Glu Asp
2965 2970 2975

Glu Thr Glu Leu His Pro Thr Leu Asn Ala Asp Asp Gln Glu Cys Lys
2980 2985 2990

Arg Asn Leu Ser Asp Ile Asp Gln Ser Phe Asp Lys Val Ala Glu Arg
2995 3000 3005

Val Leu Met Arg Leu Gln Glu Lys Leu Lys Gly Val Glu Glu Gly Thr
3010 3015 3020

Val Leu Ser Val Gly Gly Gln Val Asn Leu Leu Ile Gln Gln Ala Ile
3025 3030 3035 3040

EP 0 905 151 A2

Asp Pro Lys Asn Leu Ser Arg Leu Phe Pro Gly Trp Lys Ala Trp Val
3045 3050 3055

<210> 21

<211> 450

<212> PRT

<213> Homo sapiens

<400> 21

Met Ser Ala Ile Gln Ala Ala Trp Pro Ser Gly Thr Glu Cys Ile Ala
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Lys Tyr Asn Phe His Gly Thr Ala Glu Gln Asp Leu Pro Phe Cys Lys
20 25 30

Gly Asp Val Leu Thr Ile Val Ala Val Thr Lys Asp Pro Asn Trp Tyr
35 40 45

Lys Ala Lys Asn Lys Val Gly Arg Glu Gly Ile Ile Pro Ala Asn Tyr
50 55 60

Val Gln Lys Arg Glu Gly Val Lys Ala Gly Thr Lys Leu Ser Leu Met
65 70 75 80

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Pro Trp Phe His Gly Lys Ile Thr Arg Glu Gln Ala Glu Arg Leu Leu

85 90 95

Tyr Pro Pro Glu Thr Gly Leu Phe Leu Val Arg Glu Ser Thr Asn Tyr

100 105 110

Pro Gly Asp Tyr Thr Leu Cys Val Ser Cys Asp Gly Lys Val Glu His

115 120 125

Tyr Arg Ile Met Tyr His Ala Ser Lys Leu Ser Ile Asp Glu Glu Val

130 135 140

Tyr Phe Glu Asn Leu Met Gln Leu Val Glu His Tyr Thr Ser Asp Ala

145 150 155 160

Asp Gly Leu Cys Thr Arg Leu Ile Lys Pro Lys Val Met Glu Gly Thr

165 170 175

Val Ala Ala Gln Asp Glu Phe Tyr Arg Ser Gly Trp Ala Leu Asn Met

180 185 190

Lys Glu Leu Lys Leu Leu Gln Thr Ile Gly Lys Gly Glu Phe Gly Asp

195 200 205

Val Met Leu Gly Asp Tyr Arg Gly Asn Lys Val Ala Val Lys Cys Ile

210 215 220

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Lys Asn Asp Ala Thr Ala Gln Ala Phe Leu Ala Glu Ala Ser Val Met
225 230 235 240

Thr Gln Leu Arg His Ser Asn Leu Val Gln Leu Leu Gly Val Ile Val
245 250 255

Glu Glu Lys Gly Gly Leu Tyr Ile Val Thr Glu Tyr Met Ala Lys Gly
260 265 270

Ser Leu Val Asp Tyr Leu Arg Ser Arg Gly Arg Ser Val Leu Gly Gly
275 280 285

Asp Cys Leu Leu Lys Phe Ser Leu Asp Val Cys Glu Ala Met Glu Tyr
290 295 300

Leu Glu Gly Asn Asn Phe Val His Arg Asp Leu Ala Ala Arg Asn Val
305 310 315 320

Leu Val Ser Glu Asp Asn Val Ala Lys Val Ser Asp Phe Gly Leu Thr
325 330 335

Lys Glu Ala Ser Ser Thr Gln Asp Thr Gly Lys Leu Pro Val Lys Trp
340 345 350

Thr Ala Pro Glu Ala Leu Arg Glu Lys Lys Phe Ser Thr Lys Ser Asp

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355 360 365

Val Trp Ser Phe Gly Ile Leu Leu Trp Glu Ile Tyr Ser Phe Gly Arg

370 375 380

Val Pro Tyr Pro Arg Ile Pro Leu Lys Asp Val Val Pro Arg Val Glu

385 390 395 400

Lys Gly Tyr Lys Met Asp Ala Pro Asp Gly Cys Pro Pro Ala Val Tyr

405 410 415

Glu Val Met Lys Asn Cys Trp His Leu Asp Ala Ala Met Arg Pro Ser

420 425 430

Phe Leu Gln Leu Arg Glu Gln Leu Glu His Ile Lys Thr His Glu Leu

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His Leu

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<211> 1142

<212> PRT

<213> Homo sapiens

<400> 22

Met Ala Phe Cys Ala Lys Met Arg Ser Ser Lys Lys Thr Glu Val Asn

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20 25 30

Arg Glu Pro Leu Arg Leu Gly Ser Gly Glu Tyr Thr Ala Glu Glu Leu

35 40 45

Cys Ile Arg Ala Ala Gln Ala Cys Arg Ile Ser Pro Leu Cys His Asn

50 55 60

Leu Phe Ala Leu Tyr Asp Glu Asn Thr Lys Leu Trp Tyr Ala Pro Asn

65 70 75 80

Arg Thr Ile Thr Val Asp Asp Lys Met Ser Leu Arg Leu His Tyr Arg

85 90 95

Met Arg Phe Tyr Phe Thr Asn Trp His Gly Thr Asn Asp Asn Glu Gln

100 105 110

Ser Val Trp Arg His Ser Pro Lys Lys Gln Lys Asn Gly Tyr Glu Lys

115 120 125

Lys Lys Ile Pro Asp Ala Thr Pro Leu Leu Asp Ala Ser Ser Leu Glu

10060065.042902

130 135 140

Tyr Leu Phe Ala Gln Gly Gln Tyr Asp Leu Val Lys Cys Leu Ala Pro

145 150 155 160

Ile Arg Asp Pro Lys Thr Glu Gln Asp Gly His Asp Ile Glu Asn Glu

165 170 175

Cys Leu Gly Met Ala Val Leu Ala Ile Ser His Tyr Ala Met Met Lys

180 185 190

Lys Met Gln Leu Pro Glu Leu Pro Lys Asp Ile Ser Tyr Lys Arg Tyr

195 200 205

Ile Pro Glu Thr Leu Asn Lys Ser Ile Arg Gln Arg Asn Leu Leu Thr

210 215 220

Arg Met Arg Ile Asn Asn Val Phe Lys Asp Phe Leu Lys Glu Phe Asn

225 230 235 240

Asn Lys Thr Ile Cys Asp Ser Ser Val Ser Thr His Asp Leu Lys Val

245 250 255

Lys Tyr Leu Ala Thr Leu Glu Thr Leu Thr Lys His Tyr Gly Ala Glu

260 265 270

Ile Phe Glu Thr Ser Met Leu Leu Ile Ser Ser Glu Asn Glu Met Asn

275 280 285

Trp Phe His Ser Asn Asp Gly Gly Asn Val Leu Tyr Tyr Glu Val Met

290 295 300

Val Thr Gly Asn Leu Gly Ile Gln Trp Arg His Lys Pro Asn Val Val

305 310 315 320

Ser Val Glu Lys Glu Lys Asn Lys Leu Lys Arg Lys Lys Leu Glu Asn

325 330 335

Lys Asp Lys Lys Asp Glu Glu Lys Asn Lys Ile Arg Glu Glu Trp Asn

340 345 350

Asn Phe Ser Phe Phe Pro Glu Ile Thr His Ile Val Ile Lys Glu Ser

355 360 365

Val Val Ser Ile Asn Lys Gln Asp Asn Lys Lys Met Glu Leu Lys Leu

370 375 380

Ser Ser His Glu Glu Ala Leu Ser Phe Val Ser Leu Val Asp Gly Tyr

385 390 395 400

Phe Arg Leu Thr Ala Asp Ala His His Tyr Leu Cys Thr Asp Val Ala

405 410 415

10050065.042902

Pro Pro Leu Ile Val His Asn Ile Gln Asn Gly Cys His Gly Pro Ile

420 425 430

Cys Thr Glu Tyr Ala Ile Asn Lys Leu Arg Gln Glu Gly Ser Glu Glu

435 440 445

Gly Met Tyr Val Leu Arg Trp Ser Cys Thr Asp Phe Asp Asn Ile Leu

450 455 460

Met Thr Val Thr Cys Phe Glu Lys Ser Glu Gln Val Gln Gly Ala Gln

465 470 475 480

Lys Gln Phe Lys Asn Phe Gln Ile Glu Val Gln Lys Gly Arg Tyr Ser

485 490 495

Leu His Gly Ser Asp Arg Ser Phe Pro Ser Leu Gly Asp Leu Met Ser

500 505 510

His Leu Lys Lys Gln Ile Leu Arg Thr Asp Asn Ile Ser Phe Met Leu

515 520 525

Lys Arg Cys Cys Gln Pro Lys Pro Arg Glu Ile Ser Asn Leu Leu Val

530 535 540

Ala Thr Lys Lys Ala Gln Glu Trp Gln Pro Val Tyr Pro Met Ser Gln

10050065.042502

545 550 555 560

Leu Ser Phe Asp Arg Ile Leu Lys Lys Asp Leu Val Gln Gly Glu His
565 570 575

Leu Gly Arg Gly Thr Arg Thr His Ile Tyr Ser Gly Thr Leu Met Asp
580 585 590

Tyr Lys Asp Asp Glu Gly Thr Ser Glu Glu Lys Lys Ile Lys Val Ile
595 600 605

Leu Lys Val Leu Asp Pro Ser His Arg Asp Ile Ser Leu Ala Phe Phe
610 615 620

Glu Ala Ala Ser Met Met Arg Gln Val Ser His Lys His Ile Val Tyr
625 630 635 640

Leu Tyr Gly Val Cys Val Arg Asp Val Glu Asn Ile Met Val Glu Glu
645 650 655

Phe Val Glu Gly Gly Pro Leu Asp Leu Phe Met His Arg Lys Ser Asp
660 665 670

Val Leu Thr Thr Pro Trp Lys Phe Lys Val Ala Lys Gln Leu Ala Ser
675 680 685

EP 0 909 815 A2

Ala Leu Ser Tyr Leu Glu Asp Lys Asp Leu Val His Gly Asn Val Cys
690 695 700

Thr Lys Asn Leu Leu Leu Ala Arg Glu Gly Ile Asp Ser Glu Cys Gly
705 710 715 720

Pro Phe Ile Lys Leu Ser Asp Pro Gly Ile Pro Ile Thr Val Leu Ser
725 730 735

Arg Gln Glu Cys Ile Glu Arg Ile Pro Trp Ile Ala Pro Glu Cys Val
740 745 750

Glu Asp Ser Lys Asn Leu Ser Val Ala Ala Asp Lys Trp Ser Phe Gly
755 760 765

Thr Thr Leu Trp Glu Ile Cys Tyr Asn Gly Glu Ile Pro Leu Lys Asp
770 775 780

Lys Thr Leu Ile Glu Lys Glu Arg Phe Tyr Glu Ser Arg Cys Arg Pro
785 790 795 800

Val Thr Pro Ser Cys Lys Glu Leu Ala Asp Leu Met Thr Arg Cys Met
805 810 815

Asn Tyr Asp Pro Asn Gln Arg Pro Phe Phe Arg Ala Ile Met Arg Asp
820 825 830

WO 2005/056601 PCT/US2004/041320

Ile Asn Lys Leu Glu Glu Gln Asn Pro Asp Ile Val Ser Arg Lys Lys

835 840 845

Asn Gln Pro Thr Glu Val Asp Pro Thr His Phe Glu Lys Arg Phe Leu

850 855 860

Lys Arg Ile Arg Asp Leu Gly Glu Gly His Phe Gly Lys Val Glu Leu

865 870 875 880

Cys Arg Tyr Asp Pro Glu Asp Asn Thr Gly Glu Gln Val Ala Val Lys

885 890 895

Ser Leu Lys Pro Glu Ser Gly Gly Asn His Ile Ala Asp Leu Lys Lys

900 905 910

Glu Ile Glu Ile Leu Arg Asn Leu Tyr His Glu Asn Ile Val Lys Tyr

915 920 925

Lys Gly Ile Cys Thr Glu Asp Gly Gly Asn Gly Ile Lys Leu Ile Met

930 935 940

Glu Phe Leu Pro Ser Gly Ser Leu Lys Glu Tyr Leu Pro Lys Asn Lys

945 950 955 960

Asn Lys Ile Asn Leu Lys Gln Gln Leu Lys Tyr Ala Val Gln Ile Cys

965 970 975

Lys Gly Met Asp Tyr Leu Gly Ser Arg Gln Tyr Val His Arg Asp Leu
980 985 990

Ala Ala Arg Asn Val Leu Val Glu Ser Glu His Gln Val Lys Ile Gly
995 1000 1005

Asp Phe Gly Leu Thr Lys Ala Ile Glu Thr Asp Lys Glu Tyr Tyr Thr
1010 1015 1020

Val Lys Asp Asp Arg Asp Ser Pro Val Phe Trp Tyr Ala Pro Glu Cys
1025 1030 1035 1040

Leu Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp Val Trp Ser Phe Gly
1045 1050 1055

Val Thr Leu His Glu Leu Leu Thr Tyr Cys Asp Ser Asp Ser Ser Pro
1060 1065 1070

Met Ala Leu Phe Leu Lys Met Ile Gly Pro Thr His Gly Gln Met Thr
1075 1080 1085

Val Thr Arg Leu Val Asn Thr Leu Lys Glu Gly Lys Arg Leu Pro Cys
1090 1095 1100

EP0806435A2

Pro Pro Asn Cys Pro Asp Glu Val Tyr Gln Leu Met Arg Lys Cys Trp
1105 1110 1115 1120

Glu Phe Gln Pro Ser Asn Arg Thr Ser Phe Gln Asn Leu Ile Glu Gly
1125 1130 1135

Phe Glu Ala Leu Leu Lys
1140

<210> 23
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<212> PRT
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<400> 23
Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser
1 5 10 15

Cys Leu Leu Leu Thr Gly Ser Ser Ser Gly Ser Lys Leu Lys Asp Pro
20 25 30

Glu Leu Ser Leu Lys Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr
35 40 45

Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro

WO 2004/016750 PCT/US2003/025517

50 55 60

Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala
65 70 75 80

Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr
85 90 95

Ala Gln Ala Asn His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val
100 105 110

Pro Thr Ser Lys Lys Lys Glu Thr Glu Ser Ala Ile Tyr Ile Phe Ile
115 120 125

Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu
130 135 140

Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val
145 150 155 160

Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr
165 170 175

Leu Ile Pro Asp Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe
180 185 190

DEMANDE INTERNATIONALE

Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu
195 200 205

Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg
210 215 220

Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val
225 230 235 240

Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr
245 250 255

Pro Leu Asn Thr Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys
260 265 270

Asn Lys Arg Ala Ser Val Arg Arg Arg Ile Asp Gln Ser Asn Ser His
275 280 285

Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys
290 295 300

Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys
305 310 315 320

Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Phe Ile Thr Val
325 330 335

Lys His Arg Lys Gln Gln Val Leu Glu Thr Val Ala Gly Lys Arg Ser

340 345 350

Tyr Arg Leu Ser Met Lys Val Lys Ala Phe Pro Ser Pro Glu Val Val

355 360 365

Trp Leu Lys Asp Gly Leu Pro Ala Thr Glu Lys Ser Ala Arg Tyr Leu

370 375 380

Thr Arg Gly Tyr Ser Leu Ile Ile Lys Asp Val Thr Glu Glu Asp Ala

385 390 395 400

Gly Asn Tyr Thr Ile Leu Leu Ser Ile Lys Gln Ser Asn Val Phe Lys

405 410 415

Asn Leu Thr Ala Thr Leu Ile Val Asn Val Lys Pro Gln Ile Tyr Glu

420 425 430

Lys Ala Val Ser Ser Phe Pro Asp Pro Ala Leu Tyr Pro Leu Gly Ser

435 440 445

Arg Gln Ile Leu Thr Cys Thr Ala Tyr Gly Ile Pro Gln Pro Thr Ile

450 455 460

Lys Trp Phe Trp His Pro Cys Asn His Asn His Ser Glu Ala Arg Cys

465 470 475 480

Asp Phe Cys Ser Asn Asn Glu Glu Ser Phe Ile Leu Asp Ala Asp Ser

485 490 495

Asn Met Gly Asn Arg Ile Glu Ser Ile Thr Gln Arg Met Ala Ile Ile

500 505 510

Glu Gly Lys Asn Lys Met Ala Ser Thr Leu Val Val Ala Asp Ser Arg

515 520 525

Ile Ser Gly Ile Tyr Ile Cys Ile Ala Ser Asn Lys Val Gly Thr Val

530 535 540

Gly Arg Asn Ile Ser Phe Tyr Ile Thr Asp Val Pro Asn Gly Phe His

545 550 555 560

Val Asn Leu Glu Lys Met Pro Thr Glu Gly Glu Asp Leu Lys Leu Ser

565 570 575

Cys Thr Val Asn Lys Phe Leu Tyr Arg Asp Val Thr Trp Ile Leu Leu

580 585 590

Arg Thr Val Asn Asn Arg Thr Met His Tyr Ser Ile Ser Lys Gln Lys

595 600 605

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Met Ala Ile Thr Lys Glu His Ser Ile Thr Leu Asn Leu Thr Ile Met

610 615 620

Asn Val Ser Leu Gln Asp Ser Gly Thr Tyr Ala Cys Arg Ala Arg Asn

625 630 635 640

Val Tyr Thr Gly Glu Glu Ile Leu Gln Lys Lys Glu Ile Thr Ile Arg

645 650 655

Asp Gln Glu Ala Pro Tyr Leu Leu Arg Asn Leu Ser Asp His Thr Val

660 665 670

Ala Ile Ser Ser Ser Thr Thr Leu Asp Cys His Ala Asn Gly Val Pro

675 680 685

Glu Pro Gln Ile Thr Trp Phe Lys Asn Asn His Lys Ile Gln Gln Glu

690 695 700

Pro Gly Ile Ile Leu Gly Pro Gly Ser Ser Thr Leu Phe Ile Glu Arg

705 710 715 720

Val Thr Glu Glu Asp Glu Gly Val Tyr His Cys Lys Ala Thr Asn Gln

725 730 735

Lys Gly Ser Val Glu Ser Ser Ala Tyr Leu Thr Val Gln Gly Thr Ser

740 745 750

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Asp Lys Ser Asn Leu Glu Leu Ile Thr Leu Thr Cys Thr Cys Val Ala
755 760 765

Ala Thr Leu Phe Trp Leu Leu Leu Thr Leu Leu Ile Arg Lys Met Lys
770 775 780

Arg Ser Ser Ser Glu Ile Lys Thr Asp Tyr Leu Ser Ile Ile Met Asp
785 790 795 800

Pro Asp Glu Val Pro Leu Asp Glu Gln Cys Glu Arg Leu Pro Tyr Asp
805 810 815

Ala Ser Lys Trp Glu Phe Ala Arg Glu Arg Leu Lys Leu Gly Lys Ser
820 825 830

Leu Gly Arg Gly Ala Phe Gly Lys Val Val Gln Ala Ser Ala Phe Gly
835 840 845

Ile Lys Lys Ser Pro Thr Cys Arg Thr Val Ala Val Lys Met Leu Lys
850 855 860

Glu Gly Ala Thr Ala Ser Glu Tyr Lys Ala Leu Met Thr Glu Leu Lys
865 870 875 880

Ile Leu Thr His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly

EP0806435A2

885 890 895

Ala Cys Thr Lys Gln Gly Gly Pro Leu Met Val Ile Val Glu Tyr Cys
900 905 910

Lys Tyr Gly Asn Leu Ser Asn Tyr Leu Lys Ser Lys Arg Asp Leu Phe
915 920 925

Phe Leu Asn Lys Asp Ala Ala Leu His Met Glu Pro Lys Lys Glu Lys
930 935 940

Met Glu Pro Gly Leu Glu Gln Gly Lys Lys Pro Arg Leu Asp Ser Val
945 950 955 960

Thr Ser Ser Glu Ser Phe Ala Ser Ser Gly Phe Gln Glu Asp Lys Ser
965 970 975

Leu Ser Asp Val Glu Glu Glu Glu Asp Ser Asp Gly Phe Tyr Lys Glu
980 985 990

Pro Ile Thr Met Glu Asp Leu Ile Ser Tyr Ser Phe Gln Val Ala Arg
995 1000 1005

Gly Met Glu Phe Leu Ser Ser Arg Lys Cys Ile His Arg Asp Leu Ala
1010 1015 1020

EP0656905B1

Ala Arg Asn Ile Leu Leu Ser Glu Asn Asn Val Val Lys Ile Cys Asp
1025 1030 1035 1040

Phe Gly Leu Ala Arg Asp Ile Tyr Lys Asn Pro Asp Tyr Val Arg Lys
1045 1050 1055

Gly Asp Thr Arg Leu Pro Leu Lys Trp Met Ala Pro Glu Ser Ile Phe
1060 1065 1070

Asp Lys Ile Tyr Ser Thr Lys Ser Asp Val Trp Ser Tyr Gly Val Leu
1075 1080 1085

Leu Trp Glu Ile Phe Ser Leu Gly Gly Ser Pro Tyr Pro Gly Val Gln
1090 1095 1100

Met Asp Glu Asp Phe Cys Ser Arg Leu Arg Glu Gly Met Arg Met Arg
1105 1110 1115 1120

Ala Pro Glu Tyr Ser Thr Pro Glu Ile Tyr Gln Ile Met Leu Asp Cys
1125 1130 1135

Trp His Arg Asp Pro Lys Glu Arg Pro Arg Phe Ala Glu Leu Val Glu
1140 1145 1150

Lys Leu Gly Asp Leu Leu Gln Ala Asn Val Gln Gln Asp Gly Lys Asp
1155 1160 1165

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Tyr Ile Pro Ile Asn Ala Ile Leu Thr Gly Asn Ser Gly Phe Thr Tyr
1170 1175 1180

Ser Thr Pro Ala Phe Ser Glu Asp Phe Phe Lys Glu Ser Ile Ser Ala
1185 1190 1195 1200

Pro Lys Phe Asn Ser Gly Ser Ser Asp Asp Val Arg Tyr Val Asn Ala
1205 1210 1215

Phe Lys Phe Met Ser Leu Glu Arg Ile Lys Thr Phe Glu Glu Leu Leu
1220 1225 1230

Pro Asn Ala Thr Ser Met Phe Asp Asp Tyr Gln Gly Asp Ser Ser Thr
1235 1240 1245

Leu Leu Ala Ser Pro Met Leu Lys Arg Phe Thr Trp Thr Asp Ser Lys
1250 1255 1260

Pro Lys Ala Ser Leu Lys Ile Asp Leu Arg Val Thr Ser Lys Ser Lys
1265 1270 1275 1280

Glu Ser Gly Leu Ser Asp Val Ser Arg Pro Ser Phe Cys His Ser Ser
1285 1290 1295

Cys Gly His Val Ser Glu Gly Lys Arg Arg Phe Thr Tyr Asp His Ala

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1300 1305 1310

Glu Leu Glu Arg Lys Ile Ala Cys Cys Ser Pro Pro Pro Asp Tyr Asn

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Ser Val Val Leu Tyr Ser Thr Pro Pro Ile

1330 1335

<210> 24

<211> 309

<212> PRT

<213> Homo sapiens

<400> 24

Met Asp Glu Lys Val Phe Thr Lys Glu Leu Asp Gln Trp Ile Glu Gln

1 5 10 15

Leu Asn Glu Cys Lys Gln Leu Ser Glu Ser Gln Val Lys Ser Leu Cys

20 25 30

Glu Lys Ala Lys Glu Ile Leu Thr Lys Glu Ser Asn Val Gln Glu Val

35 40 45

Arg Cys Pro Val Thr Val Cys Gly Asp Val His Gly Gln Phe His Asp

50 55 60

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Leu Met Glu Leu Phe Arg Ile Gly Gly Lys Ser Pro Asp Thr Asn Tyr
65 70 75 80

Leu Phe Met Gly Asp Tyr Val Asp Arg Gly Tyr Tyr Ser Val Glu Thr
85 90 95

Val Thr Leu Leu Val Ala Leu Lys Val Arg Tyr Arg Glu Arg Ile Thr
100 105 110

Ile Leu Arg Gly Asn His Glu Ser Arg Gln Ile Thr Gln Val Tyr Gly
115 120 125

Phe Tyr Asp Glu Cys Leu Arg Lys Tyr Gly Asn Ala Asn Val Trp Lys
130 135 140

Tyr Phe Thr Asp Leu Phe Asp Tyr Leu Pro Leu Thr Ala Leu Val Asp
145 150 155 160

Gly Gln Ile Phe Cys Leu His Gly Gly Leu Ser Pro Ser Ile Asp Thr
165 170 175

Leu Asp His Ile Arg Ala Leu Asp Arg Leu Gln Glu Val Pro His Glu
180 185 190

Gly Pro Met Cys Asp Leu Leu Trp Ser Asp Pro Asp Asp Arg Gly Gly

EP0850305-B1

195 200 205

Trp Gly Ile Ser Pro Arg Gly Ala Gly Tyr Thr Phe Gly Gln Asp Ile

210 215 220

Ser Glu Thr Phe Asn His Ala Asn Gly Leu Thr Leu Val Ser Arg Ala

225 230 235 240

His Gln Leu Val Met Glu Gly Tyr Asn Trp Cys His Asp Arg Asn Val

245 250 255

Val Thr Ile Phe Ser Ala Pro Asn Tyr Cys Tyr Arg Cys Gly Asn Gln

260 265 270

Ala Ala Ile Met Glu Leu Asp Asp Thr Leu Lys Tyr Ser Phe Leu Gln

275 280 285

Phe Asp Pro Ala Pro Arg Arg Gly Glu Pro His Val Thr Arg Arg Thr

290 295 300

Pro Asp Tyr Phe Leu

305

<210> 25

<211> 394

<212> PRT

<213> Homo sapiens

<400> 25

Met Val Thr Met Glu Glu Leu Arg Glu Met Asp Cys Ser Val Leu Lys
1 5 10 15

Arg Leu Met Asn Arg Asp Glu Asn Gly Gly Gly Ala Gly Gly Ser Gly
20 25 30

Ser His Gly Thr Leu Gly Leu Pro Ser Gly Gly Lys Cys Leu Leu Leu
35 40 45

Asp Cys Arg Pro Phe Leu Ala His Ser Ala Gly Tyr Ile Leu Gly Ser
50 55 60

Val Asn Val Arg Cys Asn Thr Ile Val Arg Arg Arg Ala Lys Gly Ser
65 70 75 80

Val Ser Leu Glu Gln Ile Leu Pro Ala Glu Glu Glu Val Arg Ala Arg
85 90 95

Leu Arg Ser Gly Leu Tyr Ser Ala Val Ile Val Tyr Asp Glu Gly Ser
100 105 110

Pro Arg Ala Glu Ser Leu Arg Glu Asp Ser Thr Val Ser Leu Val Val

115 120 125

Gln Ala Leu Arg Arg Asn Ala Glu Arg Thr Asp Ile Cys Leu Leu Lys

130 135 140

Gly Gly Tyr Glu Arg Phe Ser Ser Glu Tyr Pro Glu Phe Cys Ser Lys

145 150 155 160

Thr Lys Ala Leu Ala Ala Ile Pro Pro Pro Val Pro Pro Ser Ala Thr

165 170 175

Glu Pro Leu Asp Leu Gly Cys Ser Ser Cys Gly Thr Pro Leu His Asp

180 185 190

Gln Gly Gly Pro Val Glu Ile Leu Pro Phe Leu Tyr Leu Gly Ser Ala

195 200 205

Tyr His Ala Ala Arg Arg Asp Met Leu Asp Ala Leu Gly Ile Thr Ala

210 215 220

Leu Leu Asn Val Ser Ser Asp Cys Pro Asn His Phe Glu Gly His Tyr

225 230 235 240

Gln Tyr Lys Cys Ile Pro Val Glu Asp Asn His Lys Ala Asp Ile Ser

245 250 255

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Ser Trp Phe Met Glu Ala Ile Glu Tyr Ile Asp Ala Val Lys Asp Cys

260 265 270

Arg Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Ala

275 280 285

Thr Ile Cys Leu Ala Tyr Leu Met Met Lys Lys Arg Val Arg Leu Glu

290 295 300

Glu Ala Phe Glu Phe Val Lys Gln Arg Arg Ser Ile Ile Ser Pro Asn

305 310 315 320

Phe Ser Phe Met Gly Gln Leu Leu Gln Phe Glu Ser Gln Val Leu Ala

325 330 335

Thr Ser Cys Ala Ala Glu Ala Ala Ser Pro Ser Gly Pro Leu Arg Glu

340 345 350

Arg Gly Lys Thr Pro Ala Thr Pro Thr Ser Gln Phe Val Phe Ser Phe

355 360 365

Pro Val Ser Val Gly Val His Ser Ala Pro Ser Ser Leu Pro Tyr Leu

370 375 380

His Ser Pro Ile Thr Thr Ser Pro Ser Cys

385 390

<210> 26

<211> 185

<212> PRT

<213> Homo sapiens

<400> 26

Met Ser Gly Ser Phe Glu Leu Ser Val Gln Asp Leu Asn Asp Leu Leu
1 5 10 15

Ser Asp Gly Ser Gly Cys Tyr Ser Leu Pro Ser Gln Pro Cys Asn Glu
20 25 30

Val Thr Pro Arg Ile Tyr Val Gly Asn Ala Ser Val Ala Gln Asp Ile
35 40 45

Pro Lys Leu Gln Lys Leu Gly Ile Thr His Val Leu Asn Ala Ala Glu
50 55 60

Gly Arg Ser Phe Met His Val Asn Thr Asn Ala Asn Phe Tyr Lys Asp
65 70 75 80

Ser Gly Ile Thr Tyr Leu Gly Ile Lys Ala Asn Asp Thr Gln Glu Phe
85 90 95

Replacement Sheet

Asn Leu Ser Ala Tyr Phe Glu Arg Ala Ala Asp Phe Ile Asp Gln Ala
100 105 110

Leu Ala Gln Lys Asn Gly Arg Val Leu Val His Cys Arg Glu Gly Tyr
115 120 125

Ser Arg Ser Pro Thr Leu Val Ile Ala Tyr Leu Met Met Arg Gln Lys
130 135 140

Met Asp Val Lys Ser Ala Leu Ser Ile Val Arg Gln Asn Arg Glu Ile
145 150 155 160

Gly Pro Asn Asp Gly Phe Leu Ala Gln Leu Cys Gln Leu Asn Asp Arg
165 170 175

Leu Ala Lys Glu Gly Lys Leu Lys Pro
180 185

<210> 27

<211> 657

<212> PRT

<213> Homo sapiens

<400> 27

Met Arg Arg Ala Val Cys Phe Pro Ala Leu Cys Leu Leu Leu Asn Leu

1 5 10 15

His Ala Ala Gly Cys Phe Ser Gly Asn Asn Asp His Phe Leu Ala Ile
20 25 30

Asn Gln Lys Lys Ser Gly Lys Pro Val Phe Ile Tyr Lys His Ser Gln
35 40 45

Asp Ile Glu Lys Ser Leu Asp Ile Ala Pro Gln Lys Ile Tyr Arg His
50 55 60

Ser Tyr His Ser Ser Ser Glu Ala Gln Val Ser Lys Arg His Gln Ile
65 70 75 80

Val Asn Ser Ala Phe Pro Arg Pro Ala Tyr Asp Pro Ser Leu Asn Leu
85 90 95

Leu Ala Met Asp Gly Gln Asp Leu Glu Val Glu Asn Leu Pro Ile Pro
100 105 110

Ala Ala Asn Val Ile Val Val Thr Leu Gln Met Asp Val Asn Lys Leu
115 120 125

Asn Ile Thr Leu Leu Arg Ile Phe Arg Gln Gly Val Ala Ala Ala Leu
130 135 140

EP 0 906 958 A1

Gly Leu Leu Pro Gln Gln Val His Ile Asn Arg Leu Ile Gly Lys Lys
145 150 155 160

Asn Ser Ile Glu Leu Phe Val Ser Pro Ile Asn Arg Lys Thr Gly Ile
165 170 175

Ser Asp Ala Leu Pro Ser Glu Glu Val Leu Arg Ser Leu Asn Ile Asn
180 185 190

Val Leu His Gln Ser Leu Ser Gln Phe Gly Ile Thr Glu Val Ser Pro
195 200 205

Glu Lys Asn Val Leu Gln Gly Gln His Glu Ala Asp Lys Ile Trp Ser
210 215 220

Lys Glu Gly Phe Tyr Ala Val Val Ile Phe Leu Ser Ile Phe Val Ile
225 230 235 240

Ile Val Thr Cys Leu Met Ile Leu Tyr Arg Leu Lys Glu Arg Phe Gln
245 250 255

Leu Ser Leu Arg Gln Asp Lys Glu Lys Asn Gln Glu Ile His Leu Ser
260 265 270

Pro Ile Thr Leu Gln Pro Ala Leu Ser Glu Ala Lys Thr Val His Ser
275 280 285

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Met Val Gln Pro Glu Gln Ala Pro Lys Val Leu Asn Val Val Val Asp

290 295 300

Pro Gln Gly Arg Gly Ala Pro Glu Ile Arg Ala Thr Thr Ala Thr Ser

305 310 315 320

Val Cys Pro Ser Pro Phe Lys Met Lys Pro Ile Gly Leu Gln Glu Arg

325 330 335

Arg Gly Ser Asn Val Ser Leu Thr Leu Asp Met Ser Ser Leu Gly Asn

340 345 350

Ile Glu Pro Phe Val Ser Ile Pro Thr Pro Arg Glu Lys Val Ala Met

355 360 365

Glu Tyr Leu Gln Ser Ala Ser Arg Ile Leu Thr Arg Ser Gln Leu Arg

370 375 380

Asp Val Val Ala Ser Ser His Leu Leu Gln Ser Glu Phe Met Glu Ile

385 390 395 400

Pro Met Asn Phe Val Asp Pro Lys Glu Ile Asp Ile Pro Arg His Gly

405 410 415

Thr Lys Asn Arg Tyr Lys Thr Ile Leu Pro Asn Pro Leu Ser Arg Val

420 425 430

Cys Leu Arg Pro Lys Asn Val Thr Asp Ser Leu Ser Thr Tyr Ile Asn

435 440 445

Ala Asn Tyr Ile Arg Gly Tyr Ser Gly Lys Glu Lys Ala Phe Ile Ala

450 455 460

Thr Gln Gly Pro Met Ile Asn Thr Val Asp Asp Phe Trp Gln Met Val

465 470 475 480

Trp Gln Glu Asp Ser Pro Val Ile Val Met Ile Thr Lys Leu Lys Glu

485 490 495

Lys Asn Glu Lys Cys Val Leu Tyr Trp Pro Glu Lys Arg Gly Ile Tyr

500 505 510

Gly Lys Val Glu Val Leu Val Ile Ser Val Asn Glu Cys Asp Asn Tyr

515 520 525

Thr Ile Arg Asn Leu Val Leu Lys Gln Gly Ser His Thr Gln His Val

530 535 540

Lys His Tyr Trp Tyr Thr Ser Trp Pro Asp His Lys Thr Pro Asp Ser

545 550 555 560

Ala Gln Pro Leu Leu Gln Leu Met Leu Asp Val Glu Glu Asp Arg Leu
565 570 575

Ala Ser Gln Gly Arg Gly Pro Val Val Val His Cys Ser Ala Gly Ile
580 585 590

Gly Arg Thr Gly Cys Phe Ile Ala Thr Ser Ile Gly Cys Gln Gln Leu
595 600 605

Lys Glu Glu Gly Val Val Asp Ala Leu Ser Ile Val Cys Gln Leu Arg
610 615 620

Met Asp Arg Gly Gly Met Val Gln Thr Ser Glu Gln Tyr Glu Phe Val
625 630 635 640

His His Ala Leu Cys Leu Tyr Glu Ser Arg Leu Ser Ala Glu Thr Val
645 650 655

Gln

<210> 28

<211> 537

<212> PRT

<213> Homo sapiens

EP 0 950 665 A2

<400> 28

Glu Arg Leu Leu Gly Arg Pro Gln Pro Ile Val Met Glu Ala Leu Asp
1   5   10   15

Glu Ala Glu Gly Leu Gln Asp Ser Gln Arg Glu Met Pro Pro Pro Pro
            20   25   30

Pro Pro Ser Pro Pro Ser Asp Pro Ala Gln Lys Pro Pro Pro Arg Gly
        35   40   45

Ala Gly Ser His Ser Leu Thr Val Arg Ser Ser Leu Cys Leu Phe Ala
    50   55   60

Ala Ser Gln Phe Leu Leu Ala Cys Gly Val Leu Trp Phe Ser Gly Tyr
65   70   75   80

Gly His Met Trp Ser Gln Asn Ala Thr Asn Leu Val Ser Ser Leu Leu
                85   90   95

Thr Leu Leu Lys Gln Leu Glu Pro Thr Ser Trp Leu Asp Ser Gly Thr
            100   105   110

Trp Gly Val Pro Gly Leu Leu Leu Val Phe Leu Ser Val Gly Leu Val
        115   120   125

10060065.012902

Leu Val Thr Thr Leu Val Trp His Leu Leu Arg Thr Pro Pro Glu Pro
130 135 140

Pro Thr Pro Leu Pro Pro Glu Asp Arg Arg Gln Ser Val Ser Arg Gln
145 150 155 160

Pro Ser Phe Thr Tyr Ser Glu Trp Met Glu Glu Lys Ile Glu Asp Asp
165 170 175

Phe Leu Asp Leu Asp Pro Val Pro Glu Thr Pro Val Phe Asp Cys Val
180 185 190

Met Asp Ile Lys Pro Glu Ala Asp Pro Thr Ser Leu Thr Val Lys Ser
195 200 205

Met Gly Leu Gln Glu Arg Arg Gly Ser Asn Val Ser Leu Thr Leu Asp
210 215 220

Met Cys Thr Pro Gly Cys Asn Glu Glu Gly Phe Gly Tyr Leu Met Ser
225 230 235 240

Pro Arg Glu Glu Ser Ala Arg Glu Tyr Leu Leu Ser Ala Ser Arg Val
245 250 255

Leu Gln Ala Glu Glu Leu His Glu Lys Ala Leu Asp Pro Phe Leu Leu
260 265 270

EP 0 956 305 B1

Gln Ala Glu Phe Phe Glu Ile Pro Met Asn Phe Val Val Pro Lys Glu

275 280 285

Tyr Asp Ile Pro Gly Arg Cys Arg Lys Asn Arg Tyr Lys Thr Ile Leu

290 295 300

Pro Asn Pro His Ser Arg Val Cys Leu Thr Ser Pro Asp Pro Asp Asp

305 310 315 320

Pro Leu Ser Ser Tyr Ile Asn Ala Asn Tyr Ile Arg Gly Tyr Gly Gly

325 330 335

Glu Glu Lys Val Tyr Ile Ala Thr Gln Gly Pro Ile Val Ser Thr Val

340 345 350

Ala Asp Phe Trp Arg Met Val Trp Gln Glu His Thr Pro Ile Ile Val

355 360 365

Met Ile Thr Asn Ile Glu Glu Met Asn Glu Lys Cys Thr Glu Tyr Trp

370 375 380

Pro Glu Glu Gln Val Ala Tyr Asp Gly Val Glu Ile Thr Val Gln Lys

385 390 395 400

Val Ile His Thr Glu Asp Tyr Arg Leu Arg Leu Ile Ser Leu Lys Ser

10060065.042602

405 410 415

Gly Thr Glu Glu Arg Gly Leu Lys His Tyr Trp Phe Thr Ser Trp Pro

420 425 430

Asp Gln Lys Thr Pro Asp Arg Ala Pro Pro Leu Leu His Leu Val Arg

435 440 445

Glu Val Glu Glu Ala Ala Gln Gln Glu Gly Pro His Cys Ala Pro Ile

450 455 460

Ile Val His Cys Ser Ala Gly Ile Gly Arg Thr Gly Cys Phe Ile Ala

465 470 475 480

Thr Ser Ile Cys Cys Gln Gln Leu Arg Gln Glu Gly Val Val Asp Ile

485 490 495

Leu Lys Thr Thr Cys Gln Leu Arg Gln Asp Arg Gly Gly Met Ile Gln

500 505 510

His Cys Glu Gln Tyr Gln Phe Val His His Val Met Ser Leu Tyr Glu

515 520 525

Lys Gln Leu Ser His Gln Ser Pro Glu

530 535

10050065.042902

<210> 29

<211> 403

<212> PRT

<213> Homo sapiens

<400> 29

Met Thr Ala Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr
1 5 10 15

Gln Glu Asp Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile
20 25 30

Ile Ala Met Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn
35 40 45

Asn Ile Asp Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His
50 55 60

Tyr Lys Ile Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys
65 70 75 80

Phe Asn Cys Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro
85 90 95

Gln Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu

Replacement Sheet

> 29

> 403

> PRT

> Homo sapiens

> 29

Thr Ala Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr
5 10 15

Glu Asp Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile
20 25 30

Ala Met Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn
35 40 45

Ile Asp Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His
50 55 60

Lys Ile Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys
70 75 80

Asn Cys Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro
85 90 95

Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu

10055005.072602

Phe Glu Phe Pro Gln Pro Leu Pro Val Cys Gly Asp Ile Lys Val Glu
245 250 255

Phe Phe His Lys Gln Asn Lys Met Leu Lys Lys Asp Lys Met Phe His
260 265 270

Phe Trp Val Asn Thr Phe Phe Ile Pro Gly Pro Glu Glu Thr Ser Glu
275 280 285

Lys Val Glu Asn Gly Ser Leu Cys Asp Gln Glu Ile Asp Ser Ile Cys
290 295 300

Ser Ile Glu Arg Ala Asp Asn Asp Lys Glu Tyr Leu Val Leu Thr Leu
305 310 315 320

Thr Lys Asn Asp Leu Asp Lys Ala Asn Lys Asp Lys Ala Asn Arg Tyr
325 330 335

Phe Ser Pro Asn Phe Lys Val Lys Leu Tyr Phe Thr Lys Thr Val Glu
340 345 350

Glu Pro Ser Asn Pro Glu Ala Ser Ser Ser Thr Ser Val Thr Pro Asp
355 360 365

Val Ser Asp Asn Glu Pro Asp His Tyr Arg Tyr Ser Asp Thr Thr Asp
370 375 380

Ser Asp Pro Glu Asn Glu Pro Phe Asp Glu Asp Gln His Thr Gln Ile
385 390 395 400

Thr Lys Val

<210> 30
<211> 447
<212> PRT
<213> Homo sapiens

<400> 30
Met Arg Ser Ser Thr Leu Gln Asp Pro Arg Arg Arg Asp Pro Gln Asp
1 5 10 15

Asp Val Tyr Val Asp Ile Thr Asp Arg Leu Arg Phe Ala Ile Leu Tyr
20 25 30

Ser Arg Pro Lys Ser Ala Ser Asn Val His Tyr Phe Ser Ile Asp Asn
35 40 45

Glu Leu Glu Tyr Glu Asn Phe Ser Glu Asp Phe Gly Pro Leu Asn Leu
50 55 60

10050065.012502

Ala Met Val Tyr Arg Tyr Cys Cys Lys Ile Asn Lys Lys Leu Lys Ser
65 70 75 80

Ile Thr Met Leu Arg Lys Lys Ile Val His Phe Thr Gly Ser Asp Gln
85 90 95

Arg Lys Gln Ala Asn Ala Ala Phe Leu Val Gly Cys Tyr Met Val Ile
100 105 110

Tyr Leu Gly Arg Thr Pro Glu Ala Ala Tyr Arg Ile Leu Ile Phe Gly
115 120 125

Asp Thr Pro Tyr Ile Pro Phe Arg Asp Ala Ala Tyr Gly Ser Cys Asn
130 135 140

Phe Tyr Ile Thr Leu Leu Asp Cys Phe His Ala Val Lys Lys Ala Met
145 150 155 160

Gln Tyr Gly Phe Leu Asn Phe Asn Ser Phe Asn Leu Asp Glu Tyr Glu
165 170 175

His Tyr Glu Lys Ala Glu Asn Gly Asp Leu Asn Trp Ile Ile Pro Asp
180 185 190

Arg Phe Ile Ala Phe Cys Gly Pro His Ser Arg Ala Arg Leu Glu Ser
195 200 205

10060065.041202

Gly Tyr His Gln His Ser Pro Glu Thr Tyr Ile Gln Tyr Phe Lys Asn

210 215 220

His Asn Val Thr Thr Ile Ile Arg Leu Asn Lys Arg Met Tyr Asp Ala

225 230 235 240

Lys Arg Phe Thr Asp Ala Gly Phe Asp His His Asp Leu Phe Phe Ala

245 250 255

Asp Gly Ser Thr Pro Thr Asp Ala Ile Val Lys Arg Phe Leu Asp Ile

260 265 270

Cys Glu Asn Ala Glu Gly Ala Ile Ala Val His Cys Lys Ala Gly Leu

275 280 285

Gly Arg Thr Gly Thr Leu Ile Ala Cys Tyr Ile Met Lys His Tyr Arg

290 295 300

Met Thr Ala Ala Glu Thr Ile Ala Trp Val Arg Ile Cys Arg Pro Gly

305 310 315 320

Leu Val Ile Gly Pro Gln Gln Gln Phe Leu Val Met Lys Gln Thr Ser

325 330 335

Leu Trp Leu Glu Gly Asp Tyr Phe Arg Gln Arg Leu Lys Gly Gln Glu

10085065.012502

340 345 350

Asn Gly Gln His Arg Ala Ala Phe Ser Lys Leu Leu Ser Gly Val Asp

355 360 365

Asp Ile Ser Ile Asn Gly Val Glu Asn Gln Asp Gln Gln Glu Pro Lys

370 375 380

Pro Tyr Ser Asp Asp Asp Glu Ile Asn Gly Val Thr Gln Gly Asp Arg

385 390 395 400

Ser Arg Ala Leu Lys Arg Arg Arg Gln Ser Lys Thr Asn Asp Ile Leu

405 410 415

Leu Pro Ser Pro Leu Ala Val Leu Thr Phe Thr Leu Cys Ser Val Val

420 425 430

Ile Trp Trp Ile Val Cys Asp Tyr Ile Leu Pro Ile Leu Leu Phe

435 440 445

<210> 31

<211> 340

<212> PRT

<213> Homo sapiens

<400> 31

Met Leu Glu Ala Pro Gly Pro Ser Asp Gly Cys Glu Leu Ser Asn Pro
1   5   10   15

Ser Ala Ser Arg Val Ser Cys Ala Gly Gln Met Leu Glu Val Gln Pro
            20   25   30

Gly Leu Tyr Phe Gly Gly Ala Ala Ala Val Ala Glu Pro Asp His Leu
        35   40   45

Arg Glu Ala Gly Ile Thr Ala Val Leu Thr Val Asp Ser Glu Glu Pro
    50   55   60

Ser Phe Lys Ala Gly Pro Gly Val Glu Asp Leu Trp Arg Leu Phe Val
65   70   75   80

Pro Ala Leu Asp Lys Pro Glu Thr Asp Leu Leu Ser His Leu Asp Arg
                85   90   95

Cys Val Ala Phe Ile Gly Gln Ala Arg Ala Glu Gly Arg Ala Val Leu
            100   105   110

Val His Cys His Ala Gly Val Ser Arg Ser Val Ala Ile Ile Thr Ala
        115   120   125

Phe Leu Met Lys Thr Asp Gln Leu Pro Phe Glu Lys Ala Tyr Glu Lys

130 135 140

Leu Gln Ile Leu Lys Pro Glu Ala Lys Met Asn Glu Gly Phe Glu Trp
145 150 155 160

Gln Leu Lys Leu Tyr Gln Ala Met Gly Tyr Glu Val Asp Thr Ser Ser
165 170 175

Ala Ile Tyr Lys Gln Tyr Arg Leu Gln Lys Val Thr Glu Lys Tyr Pro
180 185 190

Glu Leu Gln Asn Leu Pro Gln Glu Leu Phe Ala Val Asp Pro Thr Thr
195 200 205

Val Ser Gln Gly Leu Lys Asp Glu Val Leu Tyr Lys Cys Arg Lys Cys
210 215 220

Arg Arg Ser Leu Phe Arg Ser Ser Ser Ile Leu Asp His Arg Glu Gly
225 230 235 240

Ser Gly Pro Ile Ala Phe Ala His Lys Arg Met Thr Pro Ser Ser Met
245 250 255

Leu Thr Thr Gly Arg Gln Ala Gln Cys Thr Ser Tyr Phe Ile Glu Pro
260 265 270

10050065.041202

Val Gln Trp Met Glu Ser Ala Leu Leu Gly Val Met Asp Gly Gln Leu

275 280 285

Leu Cys Pro Lys Cys Ser Ala Lys Leu Gly Ser Phe Asn Trp Tyr Gly

290 295 300

Glu Gln Cys Ser Cys Gly Arg Trp Ile Thr Pro Ala Phe Gln Ile His

305 310 315 320

Lys Asn Arg Val Asp Glu Met Lys Ile Leu Pro Val Leu Gly Ser Gln

325 330 335

Thr Gly Lys Ile

340

<210> 32

<211> 150

<212> PRT

<213> Homo sapiens

<400> 32

Met Gly Val Gln Pro Pro Asn Phe Ser Trp Val Leu Pro Gly Arg Leu

1 5 10 15

Ala Gly Leu Ala Leu Pro Arg Leu Pro Ala His Tyr Gln Phe Leu Leu

20 25 30

Asp Leu Gly Val Arg His Leu Val Ser Leu Thr Glu Arg Gly Pro Pro
35 40 45

His Ser Asp Ser Cys Pro Gly Leu Thr Leu His Arg Leu Arg Ile Pro
50 55 60

Asp Phe Cys Pro Pro Ala Pro Asp Gln Ile Asp Arg Phe Val Gln Ile
65 70 75 80

Val Asp Glu Ala Asn Ala Arg Gly Glu Ala Val Gly Val His Cys Ala
85 90 95

Leu Gly Phe Gly Arg Thr Gly Thr Met Leu Ala Cys Tyr Leu Val Lys
100 105 110

Glu Arg Gly Leu Ala Ala Gly Asp Ala Ile Ala Glu Ile Arg Arg Leu
115 120 125

Arg Pro Gly Pro Ile Glu Thr Tyr Glu Gln Glu Lys Ala Val Phe Gln
130 135 140

Phe Tyr Gln Arg Thr Lys
145 150

<210> 33

<211> 322

<212> PRT

<213> Homo sapiens

<400> 33

Gly Leu Met Leu Arg Arg Leu Arg Lys Gly Asn Leu Pro Ile Arg Ser
1 5 10 15

Ile Ile Pro Asn His Ala Asp Lys Glu Arg Phe Ala Thr Arg Cys Lys
20 25 30

Ala Ala Thr Val Leu Leu Tyr Asp Glu Ala Thr Ala Glu Trp Gln Pro
35 40 45

Glu Pro Gly Ala Pro Ala Ser Val Leu Gly Leu Leu Leu Gln Lys Leu
50 55 60

Arg Asp Asp Gly Cys Gln Ala Tyr Tyr Leu Gln Gly Gly Phe Asn Lys
65 70 75 80

Phe Gln Thr Glu Tyr Ser Glu His Cys Glu Thr Asn Val Asp Ser Ser
85 90 95

Ser Ser Pro Ser Ser Ser Pro Pro Thr Ser Val Leu Gly Leu Gly Gly

100 105 110

Leu Arg Ile Ser Ser Asp Cys Ser Asp Gly Glu Ser Asp Arg Glu Leu
115 120 125

Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val Pro Ser Ser Gln
130 135 140

Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr Leu Gly Cys Ala
145 150 155 160

Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr Gly Ile Lys Tyr
165 170 175

Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe Glu His Gly Gly
180 185 190

Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His Trp Ser Gln Asn
195 200 205

Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile Asp Glu Ala Arg
210 215 220

Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala Gly Ile Ser Arg
225 230 235 240

EP0506036A2

Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys Met Asn Leu Ser
245 250 255

Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys Ser Asn Ile Ser
260 265 270

Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe Glu Arg Thr Leu
275 280 285

Gly Leu Ser Ser Pro Cys Asp Asn His Ala Ser Ser Glu Gln Leu Tyr
290 295 300

Phe Ser Thr Pro Thr Asn His Asn Leu Phe Pro Leu Asn Thr Leu Glu
305 310 315 320

Ser Thr

<210> 34

<211> 521

<212> PRT

<213> Homo sapiens

<400> 34

Met Ser Glu Pro Lys Ala Ile Asp Pro Lys Leu Ser Thr Thr Asp Arg

10050065.012502

1 5 10 15

Val Val Lys Ala Val Pro Phe Pro Pro Ser His Arg Leu Thr Ala Lys

20 25 30

Glu Val Phe Asp Asn Asp Gly Lys Pro Arg Val Asp Ile Leu Lys Ala

35 40 45

His Leu Met Lys Glu Gly Arg Leu Glu Glu Ser Val Ala Leu Arg Ile

50 55 60

Ile Thr Glu Gly Ala Ser Ile Leu Arg Gln Glu Lys Asn Leu Leu Asp

65 70 75 80

Ile Asp Ala Pro Val Thr Val Cys Gly Asp Ile His Gly Gln Phe Phe

85 90 95

Asp Leu Met Lys Leu Phe Glu Val Gly Gly Ser Pro Ala Asn Thr Arg

100 105 110

Tyr Leu Phe Leu Gly Asp Tyr Val Asp Arg Gly Tyr Phe Ser Ile Glu

115 120 125

Cys Val Leu Tyr Leu Trp Ala Leu Lys Ile Leu Tyr Pro Lys Thr Leu

130 135 140

Phe Leu Leu Arg Gly Asn His Glu Cys Arg His Leu Thr Glu Tyr Phe
145 150 155 160

Thr Phe Lys Gln Glu Cys Lys Ile Lys Tyr Ser Glu Arg Val Tyr Asp
165 170 175

Ala Cys Met Asp Ala Phe Asp Cys Leu Pro Leu Ala Ala Leu Met Asn
180 185 190

Gln Gln Phe Leu Cys Val His Gly Gly Leu Ser Pro Glu Ile Asn Thr
195 200 205

Leu Asp Asp Ile Arg Lys Leu Asp Arg Phe Lys Glu Pro Pro Ala Tyr
210 215 220

Gly Pro Met Cys Asp Ile Leu Trp Ser Asp Pro Leu Glu Asp Phe Gly
225 230 235 240

Asn Glu Lys Thr Gln Glu His Phe Thr His Asn Thr Val Arg Gly Cys
245 250 255

Ser Tyr Phe Tyr Ser Tyr Pro Ala Val Cys Glu Phe Leu Gln His Asn
260 265 270

Asn Leu Leu Ser Ile Leu Arg Ala His Glu Ala Gln Asp Ala Gly Tyr
275 280 285

10050065.012502

Arg Met Tyr Arg Lys Ser Gln Thr Thr Gly Phe Pro Ser Leu Ile Thr
290 295 300

Ile Phe Ser Ala Pro Asn Tyr Leu Asp Val Tyr Asn Asn Lys Ala Ala
305 310 315 320

Val Leu Lys Tyr Glu Asn Asn Val Met Asn Ile Arg Gln Phe Asn Cys
325 330 335

Ser Pro His Pro Tyr Trp Leu Pro Asn Phe Met Asp Val Phe Thr Trp
340 345 350

Ser Leu Pro Phe Val Gly Glu Lys Val Thr Glu Met Leu Val Asn Val
355 360 365

Leu Asn Ile Cys Ser Asp Asp Glu Leu Gly Ser Glu Glu Asp Gly Phe
370 375 380

Asp Gly Ala Thr Ala Ala Ala Arg Lys Glu Val Ile Arg Asn Lys Ile
385 390 395 400

Arg Ala Ile Gly Lys Met Ala Arg Val Phe Ser Val Leu Arg Glu Glu
405 410 415

Ser Glu Ser Val Leu Thr Leu Lys Gly Leu Thr Pro Thr Gly Met Leu

Replacement Sheet

420 425 430

Pro Ser Gly Val Leu Ser Gly Gly Lys Gln Thr Leu Gln Ser Ala Thr

435 440 445

Val Glu Ala Ile Glu Ala Asp Glu Ala Ile Lys Gly Phe Ser Pro Gln

450 455 460

His Lys Ile Thr Ser Phe Glu Glu Ala Lys Gly Leu Asp Arg Ile Asn

465 470 475 480

Glu Arg Met Pro Pro Arg Arg Asp Ala Met Pro Ser Asp Ala Asn Leu

485 490 495

Asn Ser Ile Asn Lys Ala Leu Thr Ser Glu Thr Asn Gly Thr Asp Ser

500 505 510

Asn Gly Ser Asn Ser Ser Asn Ile Gln

515 520

<210> 35

<211> 1267

<212> PRT

<213> Homo sapiens

10096065.041202

<400> 35

Asp Leu Ser Arg Ser His Cys His Val Tyr Leu Ala His Leu Glu Asn
1 5 10 15

Ser Phe Gly Pro Ser Gly Ala Arg Glu Gly Ser Leu Ser Ser Gln Asp
20 25 30

Ser Arg Thr Glu Ser Ala Ser Leu Ser Gln Ser Gln Val Asn Gly Phe
35 40 45

Phe Ala Ser His Leu Gly Asp Gln Thr Trp Gln Glu Ser Gln His Gly
50 55 60

Ser Pro Ser Pro Ser Val Ile Ser Lys Ala Thr Glu Lys Glu Thr Phe
65 70 75 80

Thr Asp Ser Asn Gln Ser Lys Thr Lys Lys Pro Gly Ile Ser Asp Val
85 90 95

Thr Asp Tyr Ser Asp Arg Gly Asp Ser Asp Met Asp Glu Ala Thr Tyr
100 105 110

Ser Ser Ser Gln Asp His Gln Thr Pro Lys Gln Glu Ser Ser Ser Ser
115 120 125

Val Asn Thr Ser Asn Lys Met Asn Phe Lys Thr Phe Pro Ser Ser Pro

130 135 140

Pro Arg Ser Gly Asp Ile Phe Glu Val Glu Leu Ala Lys Asn Asp Asn
145 150 155 160

Ser Leu Gly Ile Ser Val Thr Gly Gly Val Asn Thr Ser Val Arg His
165 170 175

Gly Gly Ile Tyr Val Lys Ala Val Ile Pro Gln Gly Ala Ala Glu Ser
180 185 190

Asp Gly Arg Ile His Lys Gly Asp Arg Val Leu Ala Val Asn Gly Val
195 200 205

Ser Leu Glu Gly Ala Thr His Lys Gln Ala Val Glu Thr Leu Arg Asn
210 215 220

Thr Gly Gln Val Val His Leu Leu Leu Glu Lys Gly Gln Ser Pro Thr
225 230 235 240

Ser Lys Glu His Val Pro Val Thr Pro Gln Cys Thr Leu Ser Asp Gln
245 250 255

Asn Ala Gln Gly Gln Gly Pro Glu Lys Val Lys Lys Thr Thr Gln Val
260 265 270

Lys Asp Tyr Ser Phe Val Thr Glu Glu Asn Thr Phe Glu Val Lys Leu
275 280 285

Phe Lys Asn Ser Ser Gly Leu Gly Phe Ser Phe Ser Arg Glu Asp Asn
290 295 300

Leu Ile Pro Glu Gln Ile Asn Ala Ser Ile Val Arg Val Lys Lys Leu
305 310 315 320

Phe Pro Gly Gln Pro Ala Ala Glu Ser Gly Lys Ile Asp Val Gly Asp
325 330 335

Val Ile Leu Lys Val Asn Gly Ala Ser Leu Lys Gly Leu Ser Gln Gln
340 345 350

Glu Val Ile Ser Ala Leu Arg Gly Thr Ala Pro Glu Val Phe Leu Leu
355 360 365

Leu Cys Arg Pro Pro Pro Gly Val Leu Pro Glu Ile Asp Thr Ala Leu
370 375 380

Leu Thr Pro Leu Gln Ser Pro Ala Gln Val Leu Pro Asn Ser Ser Lys
385 390 395 400

Asp Ser Ser Gln Pro Ser Cys Val Glu Gln Ser Thr Ser Ser Asp Glu
405 410 415

Asn Glu Met Ser Asp Lys Ser Lys Lys Gln Cys Lys Ser Pro Ser Arg
420 425 430

Lys Asp Ser Tyr Ser Asp Ser Ser Gly Ser Gly Glu Asp Asp Leu Val
435 440 445

Thr Ala Pro Ala Asn Ile Ser Asn Ser Thr Trp Ser Ser Ala Leu His
450 455 460

Gln Thr Leu Ser Asn Met Val Ser Gln Ala Gln Ser His His Glu Ala
465 470 475 480

Pro Arg Val Lys Lys Ile Pro Phe Val Pro Cys Phe Thr Ile Leu Arg
485 490 495

Lys Arg Pro Asn Lys Pro Glu Phe Glu Asp Ser Asn Pro Ser Pro Leu
500 505 510

Pro Pro Asp Met Ala Pro Gly Gln Ser Tyr Gln Pro Gln Ser Glu Ser
515 520 525

Ala Ser Ser Ser Ser Met Asp Lys Tyr His Ile His His Ile Ser Glu
530 535 540

Pro Thr Arg Gln Glu Asn Trp Thr Pro Leu Lys Asn Asp Leu Glu Asn